



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 170344

TO: Delia Ramirez
Location: 2d74 / 2c70
Art Unit: 1652
Wednesday, November 09, 2005

Case Serial Number: 09/371347

From: Noble Jarrell
Location: Biotech-Chem Library
Rem 1B71
Phone: 272-2556

Noble.jarrell@uspto.gov

Search Notes

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.
nucleic search, using sw model
November 8, 2005, 15:42:02 ; Search time 235.757 Seconds
(without alignments)
14554.251 Million cell updates/sec
US-09-371-347A-1
Perfect score: 2097
Sequence: 1 atgaggaggttctgttact.....ttcaggatatgtgcatataa 2097
Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 1.0
Searched: 1202784 seqs, 818138359 residues
Total number of hits satisfying chosen parameters: 2405568
Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
Database : Issued Patents NA.*
1: /cgn2_6/ptodata/1/ina/5A-COMB.seq.*
2: /cgn2_6/ptodata/1/ina/5B-COMB.seq.*
3: /cgn2_6/ptodata/1/ina/6A-COMB.seq.*
4: /cgn2_6/ptodata/1/ina/6B-COMB.seq.*
5: /cgn2_6/ptodata/1/ina/PCTUS-COMB.seq.*
6: /cgn2_6/ptodata/1/ina/backfiles1.seq.*
Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

ALIGNMENTS

RESULT 1

US-09-318-448-23 4780 3 US-08-880-342-20 Sequence 20, Appl
; Sequence 23, Application US/09318448 Sequence 10272, A
; Patent No. 6210950 Sequence 1477, Ap
; GENERAL INFORMATION: Sequence 12, Appl
; APPLICANT: Johnson, William G. Sequence 1, Appl
; APPLICANT: Stenroos, Edward S. Sequence 120, App
; TITLE OF INVENTION: METHODS FOR DIAGNOSING, PREVENTING, AND TREATING Sequence 120, App
; FILE OF INVENTION: DEVELOPMENTAL DISORDERS Sequence 1226, Ap
; FILE REFERENCE: 601-1-057 Sequence 13, Appl
; CURRENT APPLICATION NUMBER: US/09/318,448 Sequence 1557, Ap
; CURRENT FILING DATE: 1999-05-25 Sequence 3424, Ap
; NUMBER OF SEQ ID NOS: 46 Sequence 3357, Ap
; SOFTWARE: PatentIn Ver. 2.0 Sequence 2843, Ap
; SEQ ID NO 23 Sequence 113, Appl
; LENGTH: 3259 Sequence 2997, Ap
; TYPE: DNA Sequence 10, Appl
; ORGANISM: Homo sapiens
US-09-318-448-23

Query Match		100.0%;	Score 2097;	DB 3;	Length 3259;
Best Local Similarity		100.0%;	Pred. No. 0;		
Matches 2097;		Conservative	0;	Mismatches	0;
				Indels	0;
				Gaps	0;
QY	1	ATGAGGAGGTTTCTGTTACTATATGCTACACAGCAGGACGCGCAAGCCATCGCAGAA	60		
Db	80	ATGAGGAGGTTTCTGTTACTATATGCTACACAGCAGGACGCGCAAGCCATCGCAGAA	139		
QY	61	GAATGTGTGACGAGCTGTGTACATGATTTCTGCGAGATCTTCACGTATTAGTGAA	120		
Db	140	GAATGTGTGACGAGCTGTGTACATGATTTCTGCGAGATCTTCACGTATTAGTGAA	199		
QY	121	TCCGATAAGTATGACTAAACCGAAACAGCTCTCTGTTGTTGTGTTCTACACG	180		
Db	200	TCCGATAAGTATGACTAAACCGAAACAGCTCTCTGTTGTTGTGTTCTACACG	259		
QY	181	GGCACCAGGAGACCCACCGACACACCCCGCAAGTTGTTAAAGAAATACAGAACCAACA	240		
Db	260	GGCACCAGGAGACCCACCGACACACCCCGCAAGTTGTTAAAGAAATACAGAACCAACA	319		
QY	241	CTGCCGGTTGATTCTTTGCTCACCCTGGGTATGGTTACTGGGTCTGGTATTCAGAA	300		
Db	320	CTGCCGGTTGATTCTTTGCTCACCCTGGGTATGGTTACTGGGTCTGGTATTCAGAA	379		
QY	301	TACACCTACTTTTGAATGGGGGGAAGATAATTGATAACGACTTCAAGAGCTTGAGCC	360		
Db	380	TACACCTACTTTTGAATGGGGGGAAGATAATTGATAACGACTTCAAGAGCTTGAGCC	439		
QY	361	CGGCATTCTTATGACACTGGACATGCAGATGACTGTAGGTTTAGAACTTGTGGTTGAG	420		

Db 440 CGGCATTTCTATGACACATCGCATGCTAGTGTAGGTTTAGAACTTGTGTTGAG 499
Qy 421 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA 480
Db 500 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA 559
Qy 481 GAGGAGATAAGTGGGCGACTCCGGTGGCATCACCTGCGATCCTTTGAGGACAGACCTTGTG 540
Db 560 GAGGAGATAAGTGGGCGACTCCGGTGGCATCACCTGCGATCCTTTGAGGACAGACCTTGTG 619
Qy 541 AAGTCAGAGCTCTACACATTTGAATCTCAAGTCGAGCTTTCTGAGATTCGATGATTCAGGA 600
Db 620 AAGTCAGAGCTCTACACATTTGAATCTCAAGTCGAGCTTTCTGAGATTCGATGATTCAGGA 679
Qy 601 AGAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 660
Db 680 AGAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 739
Qy 661 ATTGAAGACTTTGAGTCCTCACTTACCCTGTCGGTACCCCACTCTCAAGCCTCTCTG 720
Db 740 ATTGAAGACTTTGAGTCCTCACTTACCCTGTCGGTACCCCACTCTCAAGCCTCTCTG 799
Qy 721 AATATTCTCTGTTTACCCCCAGAAATATTTACAGTACATCTGCAGGAGTCTCTTGCCAG 780
Db 800 AATATTCTCTGTTTACCCCCAGAAATATTTACAGTACATCTGCAGGAGTCTCTTGCCAG 859
Qy 781 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATTCGAGTTTTCAGTGCCTCAATTTCAAAG 840
Db 860 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATTCAGTATTTTCAAGTGCCTCAATTTCAAAG 919
Qy 841 GCAGTTTCAACTTACTACGAATGATGCTATAAAGCAACCTCTGCTGTAGAAATGGACATTT 900
Db 920 GCAGTTTCAACTTACTACGAATGATGCTATAAAGCAACCTCTGCTGTAGAAATGGACATTT 979
Qy 901 TCAATATACAGACTTTTCTTATCAGCCTGGAGATGCTTTCAGCGTGATCTGCTTAAACAGT 960
Db 980 TCAATATACAGACTTTTCTTATCAGCCTGGAGATGCTTTCAGCGTGATCTGCTTAAACAGT 1039
Qy 961 GATTCAGGATCAAAAGCCTACTCCAAAGACTGCGAGCTTGAAGATAAAGAGAGCACTGC 1020
Db 1040 GATTCAGGATCAAAAGCCTACTCCAAAGACTGCGAGCTTGAAGATAAAGAGAGCACTGC 1099
Qy 1021 GTCTCTTTGAAATAAAGGCAGACACAAAGAGAGAGGAGTACCTTACCCAGCATATA 1080
Db 1100 GTCTCTTTGAAATAAAGGCAGACACAAAGAGAGAGGAGTACCTTACCCAGCATATA 1159
Qy 1081 CTGCGGGATGTTCTCTCCAGTTTCAATTTTACCTGGTGCTTGAATCCGAGCAATTCCT 1140
Db 1160 CTGCGGGATGTTCTCTCCAGTTTCAATTTTACCTGGTGCTTGAATCCGAGCAATTCCT 1219
Qy 1141 AAAAAGGCATTTTGGAGCCCTTGTGGACTATACAGTGACAGTGCTGAAAAGCGCAGG 1200
Db 1220 AAAAAGGCATTTTGGAGCCCTTGTGGACTATACAGTGACAGTGCTGAAAAGCGCAGG 1279
Qy 1201 CTACAGGAGCTGTGAGTAAACAAAGGGCAGCGGATATAGCGCTTGTACGAGATGCC 1260
Db 1280 CTACAGGAGCTGTGAGTAAACAAAGGGCAGCGGATATAGCGCTTGTACGAGATGCC 1339
Qy 1261 TGTGCTGCTGTTGGATCTCTCTCGCTTTCCCTTTTGGCAGCCACCTCAAGTCTC 1320
Db 1340 TGTGCTGCTGTTGGATCTCTCTCGCTTTCCCTTTTGGCAGCCACCTCAAGTCTC 1399
Qy 1321 CTGCTCGAATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1400 CTGCTCGAATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1459
Qy 1381 TTTTACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGAAATTTCTGTCTACTGCCACA 1440
Db 1460 TTTTACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGAAATTTCTGTCTACTGCCACA 1519
Qy 1441 ACAGAGGTTTCTCGGAAGGGAGTATGTACAGGCTGGCTGGCCCTTGTGTTGCTTCAGTT 1500
Db 1520 ACAGAGGTTTCTCGGAAGGGAGTATGTACAGGCTGGCTGGCCCTTGTGTTGCTTCAGTT 1579

Qy 1501 CTTTCCAGCCAAACATACATGCTCCATGTAAGACAGCGGAAAGCCCTGGCTCCTAAGATA 1560
Db 1580 CTTTCCAGCCAAACATACATGCTCCATGTAAGACAGCGGAAAGCCCTGGCTCCTAAGATA 1639
Qy 1561 TCCATCTCTCTCCGAAACAAACAAATTTCTTCCACTTTACAGATGACCCCTCAATCCCATC 1620
Db 1640 TCCATCTCTCTCCGAAACAAACAAATTTCTTCCACTTTACAGATGACCCCTCAATCCCATC 1699
Qy 1621 ATAAATGGTGGTCCAGGAAACCGGCATAGCCCGTTTATTTGGGTTCTTACAAATAGAGAG 1680
Db 1700 ATAAATGGTGGTCCAGGAAACCGGCATAGCCCGTTTATTTGGGTTCTTACAAATAGAGAG 1759
Qy 1681 AAATCTCCAGACACACCCAGATGGAATTTTGGAGCAATGCTGTTGTTTGGCTGC 1740
Db 1760 AAATCTCCAGACACACCCAGATGGAATTTTGGAGCAATGCTGTTGTTTGGCTGC 1819
Qy 1741 AGGCATAAGGATAGGATTTATCTATTTCAGAAAAGAGCTCAGACATTTTCCTTAAGCATGG 1800
Db 1820 AGGCATAAGGATAGGATTTATCTATTTCAGAAAAGAGCTCAGACATTTTCCTTAAGCATGG 1879
Qy 1801 ATCTTAACTCACTTAAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1860
Db 1880 ATCTTAACTCACTTAAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1939
Qy 1861 CCAGCAAAAGTATGTAACAAGACACATCCAGCTTTCATGGCCAGCAGGTGGCGAATCTCTC 1920
Db 1940 CCAGCAAAAGTATGTAACAAGACACATCCAGCTTTCATGGCCAGCAGGTGGCGAATCTCTC 1999
Qy 1921 CTCCAGGAGAACGGCCATATTTATGTTGTGGAGATGCAAGAAATATGGCCAAAGATGTA 1980
Db 2000 CTCCAGGAGAACGGCCATATTTATGTTGTGGAGATGCAAGAAATATGGCCAAAGATGTA 2059
Qy 1981 CATGATGCCCTTGTCCAAATATAAGCAAAAGAGTTTGGAGTTTGAATACTAGAACCAATG 2040
Db 2060 CATGATGCCCTTGTCCAAATATAAGCAAAAGAGTTTGGAGTTTGAATACTAGAACCAATG 2119
Qy 2041 AAAACCTTGGCCACTTTAAAGAAAGAAAAACGCTACCTTCAGGATATTTGGTCATAA 2097
Db 2120 AAAACCTTGGCCACTTTAAAGAAAGAAAAACGCTACCTTCAGGATATTTGGTCATAA 2176

RESULT 2

US-09-949-016-4215
; Sequence 4215, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4215
; LENGTH: 3242
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-4215

Query Match 99.8%; Score 2092.2; DB 4; Length 3242;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 2094; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 ATGAGAGGTTTCTGCTTACTATATGCTACACAGCAGGACAGGCAAGGCCATCGCAGAA 60
|||||

APPLICANT: Lacroix, Bruno
TITLE OF INVENTION: 5' ESTs FOR SECRETED PROTEINS
NUMBER OF SEQUENCES: 503
CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson & Bear
STREET: 501 West Broadway
CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92101-3505
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Win95
SOFTWARE: Word
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/905,223
FILING DATE:
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Israelsen, Ned A.
REGISTRATION NUMBER: 29,655
REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 235-8550
TELEFAX: (619) 235-0176
INFORMATION FOR SEQ ID NO: 71:
SEQUENCE CHARACTERISTICS:
LENGTH: 390 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: DOUBLE
TOPOLOGY: LINEAR
MOLECULE TYPE: CDNA
ORIGINAL SOURCE:
ORGANISM: Homo Sapiens
TISSUE TYPE: Brain
FEATURE:
NAME/KEY: sig_peptide
LOCATION: 289..357
IDENTIFICATION METHOD: Von Heijne matrix
OTHER INFORMATION: score 6.9
OTHER INFORMATION: seq SL5LLASHSVSC/SN
US-08-905-223-71

Query Match 18.4%; Score 386.4; DB 3; Length 390;
Best Local Similarity 99.7%; Pred. No. 1.1e-122;
Matches 387; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 968 AGGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGCACTGGTCTCTTT 1027
Db 1 AGGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGCACTGGTCTCTTT 60

QY 1028 TGAATAAAGGCAGACACAAAGAAAGAGGAGCTACCTTTACCCAGCATATACCTGCGG 1087
Db 61 TGAATAAAGGCAGACACAAAGAAAGAGGAGCTACCTTTACCCAGCATATACCTGCGG 120

QY 1088 GATGTTCTCCAGTTTCATTTTACCTGTGTTTGAATCCGAGCAATTCCTAAAAG 1147
Db 121 GATGTTCTCCAGTTTCATTTTACCTGTGTTTGAATCCGAGCAATTCCTAAAAG 180

QY 1148 CATTTTTCGAGCCCTTGTGGACTATACAGTACAGTGTGAAAGCGCAGGCTACAGG 1207
Db 181 CATTTTTCGAGCCCTTGTGGACTATACAGTACAGTGTGAAAGCGCAGGCTACAGG 240

QY 1208 AGCTGTGCAGTAAACAAAGGGGAGCGCATATAGCCGCTTTGTACGAGATGCTGTGCCT 1267
Db 241 AGCTGTGCAGTAAACAAAGGGGAGCGCATATAGCCGCTTTGTACGAGATGCTGTGCCT 300

QY 1268 GCTTGTGGATCTCCCTCGCTTCCCTCTTTGCCAGCCACCACCTCAGTCTCTCTGCTG 1327
Db 301 GCTTGTGGATCTCCCTCGCTTCCCTCTTTGCCAGCCACCACCTCAGTCTCTCTGCTG 360

QY 1328 AACATCTTCTCAAACTTCAACCCAGACC 1355

Db 361 AACATCTTCTCAAACTTCAACCCAGACC 388

RESULT 4
US-09-949-016-150019
; Sequence 150019, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq For Windows Version 4.0
; SEQ ID NO 150019
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150019

Query Match 18.1%; Score 380.6; DB 4; Length 601;
Best Local Similarity 99.7%; Pred. No. 1.5e-120;
Matches 380; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 401 GTTTAGAACTTGTGTTGAGCCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAAT 460
Db 178 GTTTAGAACTTGTGTTGAGCCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAAT 237

QY 461 TTAGGTCAAGCAGAGCACAAGAGGAGATAAGTGGGCACTCCCGGTGGCATCACCTGCAT 520
Db 238 TTAGGTCAAGCAGAGCACAAGAGGAGATAAGTGGGCACTCCCGGTGGCATCACCTGCAT 297

QY 521 CCTTGAGGACAGACCTTGTGAAGTCAGAGCTCTACACATTGAATCTCAAGTCGAGCTTC 580
Db 298 CCTYGAGGACAGACCTTGTGAAGTCAGAGCTCTACACATTGAATCTCAAGTCGAGCTTC 357

QY 581 TGAGATTTCGATGATTCAGGAAGAGGATCTTGAGGTTTGAAGCAAAATGCAGTGAACA 640
Db 358 TGAGATTTCGATGATTCAGGAAGAGGATCTTGAGGTTTGAAGCAAAATGCAGTGAACA 417

QY 641 GCAACCAATCCCAATGTTGTAATTGAAGACTTTTGAGTCCTCACTTACCCGTTGGTACCCC 700
Db 418 GCAACCAATCCCAATGTTGTAATTGAAGACTTTTGAGTCCTCACTTACCCGTTGGTACCCC 477

QY 701 CACTCTCAACAGCCTCTCTGAATATTCTTGTTTACCCCAAGATATTTACAGGTACATC 760
Db 478 CACTCTCAACAGCCTCTCTGAATATTCTTGTTTACCCCAAGATATTTACAGGTACATC 537

QY 761 TGCAGGAGTCTCTGGCCAGG 781
Db 538 TGCAGGAGTCTCTGGCCAGG 558

RESULT 5
US-09-949-016-15957
; Sequence 15957, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14

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; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15957
; LENGTH: 35916
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-15957

Query Match
Best Local Similarity 18.1%; Score 379.4; DB 4; Length 35916;
Matches 380; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 401 GTTTAGAACTTGTGTTGAGCCGTGGATTGCTGGACTCTGGCCAGGCCCTCAGAAAGCATT 460
DB 10781 GTTTAGAACTTGTGTTGAGCCGTGGATTGCTGGACTCTGGCCAGGCCCTCAGAAAGCATT 10840

QY 461 TTAGGTCAAGCAGAGGACAAAGAGGAGATAAGTGGGCACTCCCGGTGGCATCACCTGCAT 520
DB 10841 TTAGGTCAAGCAGAGGACAAAGAGGAGATAAGTGGGCACTCCCGGTGGCATCACCTGCAT 10900

QY 521 CCTTGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTC 580
DB 10901 CCTTGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTC 10960

QY 581 TCAGATTTCGATGATTCAGAGAGAGGAGATTCTGAGGTTTGAAGCAAAATGCAAGTGAACA 640
DB 10961 TCAGATTTCGATGATTCAGAGAGAGGAGATTCTGAGGTTTGAAGCAAAATGCAAGTGAACA 11020

QY 641 GCAACCAATCCAAATGTTGAATTTGAAGACTTTGAGTCTCACTTACCCGTTCCGTACCCC 700
DB 11021 GCAACCAATCCAAATGTTGAATTTGAAGACTTTGAGTCTCACTTACCCGTTCCGTACCCC 11080

QY 701 CACTCTCAACAGCCTCTCTGAATATTTCTGGTTTACCCCAAGATATTTACAGGTACATC 760
DB 11081 CACTCTCAACAGCCTCTCTGAATATTTCTGGTTTACCCCAAGATATTTACAGGTACATC 11140

QY 761 TCAGAGAGTCTCTGGCCAGG 781
DB 11141 TCAGAGAGTCTCTGGCCAGG 11161

RESULT 6
US-09-949-016-150020
; Sequence 150020, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150020
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150020

Query Match
Best Local Similarity 18.1%; Score 379; DB 4; Length 601;
Matches 379; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 401 GTTTAGAACTTGTGTTGAGCCGTGGATTGCTGGACTCTGGCCAGGCCCTCAGAAAGCATT 460
DB 10781 GTTTAGAACTTGTGTTGAGCCGTGGATTGCTGGACTCTGGCCAGGCCCTCAGAAAGCATT 10840

QY 461 TTAGGTCAAGCAGAGGACAAAGAGGAGATAAGTGGGCACTCCCGGTGGCATCACCTGCAT 520
DB 10841 TTAGGTCAAGCAGAGGACAAAGAGGAGATAAGTGGGCACTCCCGGTGGCATCACCTGCAT 10900

QY 521 CCTTGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTC 580
DB 10901 CCTTGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTC 10960

QY 581 TCAGATTTCGATGATTCAGAGAGAGGAGATTCTGAGGTTTGAAGCAAAATGCAAGTGAACA 640
DB 10961 TCAGATTTCGATGATTCAGAGAGAGGAGATTCTGAGGTTTGAAGCAAAATGCAAGTGAACA 11020

QY 641 GCAACCAATCCAAATGTTGAATTTGAAGACTTTGAGTCTCACTTACCCGTTCCGTACCCC 700
DB 11021 GCAACCAATCCAAATGTTGAATTTGAAGACTTTGAGTCTCACTTACCCGTTCCGTACCCC 11080

QY 701 CACTCTCAACAGCCTCTCTGAATATTTCTGGTTTACCCCAAGATATTTACAGGTACATC 760
DB 11081 CACTCTCAACAGCCTCTCTGAATATTTCTGGTTTACCCCAAGATATTTACAGGTACATC 11140

QY 761 TCAGAGAGTCTCTGGCCAGG 781
DB 11141 TCAGAGAGTCTCTGGCCAGG 11161

US-09-949-016-150037
; Sequence 150037, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150037
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150037

Query Match
Best Local Similarity 9.1%; Score 190.4; DB 4; Length 601;
Matches 191; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1369 AGCTCAAGTTTATTTTACCCAGGAAAGCTCCATTTTGTCTTCAACATTGTGGAATTCG 1428
DB 18 AGCTCAAGTTTATTTTACCCAGGAAAGCTCCATTTTGTCTTCAACATTGTGGAATTCG 77

QY 1429 TCTACTGCCACACAGAGGTTCTCGGAGGGAGATGTACAGGCTGCGCTGCTGTTG 1488
DB 78 TCTACTGCCACACAGAGGTTCTCGGAGGGAGATGTACAGGCTGCGCTGCTGTTG 137

QY 1489 GTTGCTTCAGTTCTTTCAGCCAAACATACATGTCATCCCATGAAGACAGCGGGAAGCCCTG 1548
DB 138 GTTGCTTCAGTTCTTTCAGCCAAACATACATGTCATCCCATGAAGACAGCGGGAAGCCCTG 197
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Best Local Similarity 99.5%; Pred. No. 5.5e-120;
Matches 379; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 401 GTTTAGAACTTGTGTTGAGCCGTGGATTGCTGGACTCTGGCCAGGCCCTCAGAAAGCATT 460
DB 165 GTTTAGAACTTGTGTTGAGCCGTGGATTGCTGGACTCTGGCCAGGCCCTCAGAAAGCATT 224

QY 461 TTAGGTCAAGCAGAGGACAAAGAGGAGATAAGTGGGCACTCCCGGTGGCATCACCTGCAT 520
DB 225 TTAGGTCAAGCAGAGGACAAAGAGGAGATAAGTGGGCACTCCCGGTGGCATCACCTGCAT 284

QY 521 CCTTGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTC 580
DB 285 CCTTGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTC 344

QY 581 TCAGATTTCGATGATTCAGAGAGAGGAGATTCTGAGGTTTGAAGCAAAATGCAAGTGAACA 640
DB 345 TCAGATTTCGATGATTCAGAGAGAGGAGATTCTGAGGTTTGAAGCAAAATGCAAGTGAACA 404

QY 641 GCAACCAATCCAAATGTTGAATTTGAAGACTTTGAGTCTCACTTACCCGTTCCGTACCCC 700
DB 405 GCAACCAATCCAAATGTTGAATTTGAAGACTTTGAGTCTCACTTACCCGTTCCGTACCCC 464

QY 701 CACTCTCAACAGCCTCTCTGAATATTTCTGGTTTACCCCAAGATATTTACAGGTACATC 760
DB 465 CACTCTCAACAGCCTCTCTGAATATTTCTGGTTTACCCCAAGATATTTACAGGTACATC 524

QY 761 TCAGAGAGTCTCTGGCCAGG 781
DB 525 TCAGAGAGTCTCTGGCCAGG 545

RESULT 7
US-09-949-016-150037
; Sequence 150037, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150037
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150037

Query Match
Best Local Similarity 9.1%; Score 190.4; DB 4; Length 601;
Matches 191; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1369 AGCTCAAGTTTATTTTACCCAGGAAAGCTCCATTTTGTCTTCAACATTGTGGAATTCG 1428
DB 18 AGCTCAAGTTTATTTTACCCAGGAAAGCTCCATTTTGTCTTCAACATTGTGGAATTCG 77

QY 1429 TCTACTGCCACACAGAGGTTCTCGGAGGGAGATGTACAGGCTGCGCTGCTGTTG 1488
DB 78 TCTACTGCCACACAGAGGTTCTCGGAGGGAGATGTACAGGCTGCGCTGCTGTTG 137

QY 1489 GTTGCTTCAGTTCTTTCAGCCAAACATACATGTCATCCCATGAAGACAGCGGGAAGCCCTG 1548
DB 138 GTTGCTTCAGTTCTTTCAGCCAAACATACATGTCATCCCATGAAGACAGCGGGAAGCCCTG 197
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; Patent No. 6682888
; GENERAL INFORMATION:
; APPLICANT: Loring, Jeanne F.
; APPLICANT: Tingley, Debra W.
; APPLICANT: Edwards, Carla M.
; TITLE OF INVENTION: GENES EXPRESSED IN ALZHEIMER'S DISEASE
; FILE REFERENCE: PA-0024 US
; CURRENT APPLICATION NUMBER: US/09/566,921
; CURRENT FILING DATE: 2000-05-05
; NUMBER OF SEQ ID NOS: 138
; SOFTWARE: PERL Program
; SEQ ID NO 88
; LENGTH: 2475
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. 6682888 255828.26
; NAME/KEY: unsure
; LOCATION: 1001, 1011
; OTHER INFORMATION: a, t, c, g, or other
US-09-566-921-88

Query Match
Best Local Similarity 8.3%; Score 174.4; DB 4; Length 2475;
Matches 178; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 510 ATCACTGTCATCTTGAGGACAGACCTTGGAAGTCAGAGCTGCTACACATTGAAATCTCA 569
DB 1 ATCACTGTCATCTTGAGGACAGACCTTGGAAGTCAGAGCTGCTACACATTGAAATCTCA 60
QY 570 AGTCGAGCTTCTGAGATTCGATTCAGGAAGAAAGGATTCGAGGTTTGAAGCAAAA 629
DB 61 AGTCGAGCTTCTGAGATTCGATTCAGGAAGAAAGGATTCGAGGTTTGAAGCAAAA 120
QY 630 TGCAGTGAACAGCAACCAATCCAAATGTTGTAATTGAAGACTTTGAGTCTCTACCTACCG 689
DB 121 TGCAGTGAACAGCAACCAATCCAAATGTTGTAATTGAAGACTTTGAGTCTCTACCGATCTC 180
QY 690 TTGC 693
DB 181 TTGC 184

RESULT 12
US-09-949-016-150030
; Sequence 150030, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150030
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150030

Query Match
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Matches 156; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

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DB 151 TCTAGAATACAGACTTTTCCTATACAGCTGGAGATGCCCTTCAGCGTGATCTGCCCTAAACA 210
QY 959 GTGATTCTGAGGTACAAAGCCTTACTCCAAAGACTCGAGCTTCAAGATAAAAGAGAGCACT 1018
DB 211 GTGATTCTGAGGTACAAAGCCTTACTCCAAAGACTCGAGCTTCAAGATAAAAGAGAGCACT 270
QY 1019 GCGTCCTTTTGAATAAAGGCAGACACAAAGAAAGG 1058
DB 271 GCGTCCTTTTGAATAAAGGCAGACACAAAGAAAGG 310

RESULT 13
US-09-949-016-150031
; Sequence 150031, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150031
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150031

Query Match
Best Local Similarity 97.5%; Pred. No. 2.6e-42;
Matches 156; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

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DB 151 TCTAGAATACAGACTTTTCCTATACAGCTGGAGATGCCCTTCAGCGTGATCTGCCCTAAACA 210
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DB 211 GTGATTCTGAGGTACAAAGCCTTACTCCAAAGACTCGAGCTTCAAGATAAAAGAGAGCACT 270
QY 1019 GCGTCCTTTTGAATAAAGGCAGACACAAAGAAAGG 1058
DB 271 GCGTCCTTTTGAATAAAGGCAGACACAAAGAAAGG 310

RESULT 14
US-09-471-276-495
; Sequence 495, Application US/09471276
; Patent No. 6822072
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Duclert A.
; APPLICANT: Giordano, J.Y.
; TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
; Patent No. 6822072
; FILE REFERENCE: GENSET.025CPI
; CURRENT APPLICATION NUMBER: US/09/471,276
; CURRENT FILING DATE: 1999-12-21
; EARLIER APPLICATION NUMBER: 09/057,719
; EARLIER FILING DATE: 1998-04-09
; EARLIER APPLICATION NUMBER: 09/069,047
; EARLIER FILING DATE: 1998-04-28
; EARLIER APPLICATION NUMBER: PCT/IB99/00712
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; EARLIER FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 1622
; SOFTWARE: Patent.pm
; SEQ ID NO 495
; LENGTH: 244
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 70..243
; NAME/KEY: sig_peptide
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; OTHER INFORMATION: score 4.4000009536743
; OTHER INFORMATION: seq RELLLYATQGGQA/KA
US-09-471-276-495

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Best Local Similarity 88.1%; Pred. No. 2.6e-34;
Matches 141; Conservative 1; Mismatches 18; Indels 0; Gaps 0;

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QY 61 GAAATGTGTGACCAAGCTGTGGTACATGGATTTCTGCAGATCTTCACTGTATTAGTGAA 120
Db |||||||
130 GAAATGTGTGACCAAGCTGTGGTACATGGATTTCTGCAGATCTTCACTGTATTAGTGAA 189
QY 121 TCCGATAAGTATGACCTCAAAACCGAAACAGCTCTCTTTG 160
Db |||||||
190 TCCGATAAGTCTCGGTGATTGAGATACACCTACTTTTG 229

RESULT 15
US-09-949-016-150007
; Sequence 150007, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150007
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150007

Query Match 6.1%; Score 128.6; DB 4; Length 601;
Best Local Similarity 99.2%; Pred. No. 3.1e-33;
Matches 128; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGAGAGGTTTCTGTACTATATGCTACACAGCAGGGACAGGCAAAAGGCCATCGCAGAA 60
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QY 61 GAAATGTGTGACCAAGCTGTGGTACATGGATTTCTGCAGATCTTCACTGTATTAGTGAA 120
Db |||||||
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QY 121 TCCGATAAG 129
Db |||||||

Db 356 TCCGATAAG 364

Search completed: November 8, 2005, 17:00:48
Job time : 237.757 secs

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: November 8, 2005, 16:35:10 ; Search time 1123.15 Seconds
(without alignments)
15440.336 Million cell updates/sec

Title: US-09-371-347A-1

Perfect score: 2097

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Total number of hits satisfying chosen parameters: 19589580

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

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- 12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq.*
- 13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq.*
- 14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq.*
- 15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq.*
- 16: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq.*
- 17: /cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq.*
- 18: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq.*
- 19: /cgn2_6/ptodata/1/pubpna/US10F_PUBCOMB.seq.*
- 20: /cgn2_6/ptodata/1/pubpna/US10G_PUBCOMB.seq.*
- 21: /cgn2_6/ptodata/1/pubpna/US10H_PUBCOMB.seq.*
- 22: /cgn2_6/ptodata/1/pubpna/US10I_PUBCOMB.seq.*
- 23: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq.*
- 24: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq.*
- 25: /cgn2_6/ptodata/1/pubpna/US11A_PUBCOMB.seq.*
- 26: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq.*
- 27: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq.*
- 28: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq.*
- 29: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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3	2097	100.0	3259	10	US-09-371-347-24
4	2097	100.0	3259	24	US-10-450-763-874
5	2097	100.0	3259	26	US-11-119-096-24

6	2095.4	99.9	2097	10	US-09-371-347-1	Sequence 41, Appl
7	2095.4	99.9	2097	10	US-09-371-347-43	Sequence 43, Appl
8	2095.4	99.9	2097	26	US-11-119-096-1	Sequence 41, Appl
9	2095.4	99.9	2097	26	US-11-119-096-41	Sequence 43, Appl
10	2088.6	99.6	3256	22	US-10-741-600-692	Sequence 692, App
11	2088.6	99.6	3274	22	US-10-741-600-693	Sequence 693, App
12	2081	99.2	2094	10	US-09-371-347-45	Sequence 45, Appl
13	2081	99.2	2094	26	US-11-119-096-45	Sequence 45, Appl
14	2079	99.1	2093	10	US-09-371-347-47	Sequence 47, Appl
15	2079	99.1	2093	26	US-11-119-096-47	Sequence 47, Appl
16	379.8	18.1	43985	22	US-10-741-600-17757	Sequence 17757, A
17	379.8	18.1	591	17	US-10-029-386-17359	Sequence 17359, Ap
18	377.8	18.0	591	17	US-10-029-386-1735	Sequence 20100, A
19	377.4	18.0	379	17	US-10-029-386-15435	Sequence 15435, A
20	375.8	17.9	379	17	US-10-029-386-15435	Sequence 15435, A
21	286	13.6	583	13	US-09-925-065A-758988	Sequence 758988,
22	284.8	13.6	583	13	US-09-925-065A-827971	Sequence 827971,
23	275.8	13.2	503	24	US-10-450-763-873	Sequence 873, App
24	200.6	9.6	201	22	US-10-741-600-15583	Sequence 15583, A
25	200.6	9.6	201	22	US-10-741-600-15584	Sequence 15584, A
26	200.6	9.6	201	22	US-10-741-600-15589	Sequence 15589, A
27	200.6	9.6	201	22	US-10-741-600-15590	Sequence 15590, A
28	200.6	9.6	201	22	US-10-741-600-15592	Sequence 15592, A
29	200.6	9.6	201	22	US-10-741-600-15593	Sequence 15593, A
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33	200.6	9.6	201	22	US-10-741-600-15600	Sequence 15600, A
34	200.6	9.6	201	22	US-10-741-600-15602	Sequence 15602, A
35	200.6	9.6	201	22	US-10-741-600-15606	Sequence 15606, A
36	200.6	9.6	201	22	US-10-741-600-15609	Sequence 15609, A
37	200.6	9.6	201	22	US-10-741-600-15610	Sequence 15610, A
38	200.6	9.6	201	22	US-10-741-600-15612	Sequence 15612, A
39	200.6	9.6	201	22	US-10-741-600-15613	Sequence 15613, A
40	200.6	9.6	201	22	US-10-741-600-15614	Sequence 15614, A
41	200.6	9.6	201	22	US-10-741-600-15620	Sequence 15620, A
42	200.6	9.6	201	22	US-10-741-600-15621	Sequence 15621, A
43	200.6	9.6	201	22	US-10-741-600-15623	Sequence 15623, A
44	200.6	9.6	201	22	US-10-741-600-15624	Sequence 15624, A
45	200.6	9.6	201	22	US-10-741-600-15625	Sequence 15625, A

ALIGNMENTS

RESULT 1

US-09-371-347-1
; Sequence 1, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE;
; TITLE OF INVENTION: CLONING AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-1

Query Match 100.0%; Score 2097; DB 10; Length 2097;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2097; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 61 GAAATGTGTAGCAAGCTGTGTGTACATGGATTTTCTGCAGATCTTCACTGTATTAGTGAA 120
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QY 1441 ACAGAGGTTCTCGGAAAGGAGTATGTACAGGCTGGCTGTGGCTTGTGGTTGCTTCAGTT 1500
Db |||||
QY 1441 ACAGAGGTTCTCGGAAAGGAGTATGTACAGGCTGGCTGTGGCTTGTGGTTGCTTCAGTT 1500
Db |||||
QY 1501 CTTTACGCCAAAACATACATGATCCCATGAAGACAGCGGAAAGCCCTGGCTCTTAAGATA 1560
Db |||||
QY 1501 CTTTACGCCAAAACATACATGATCCCATGAAGACAGCGGAAAGCCCTGGCTCTTAAGATA 1560
Db |||||
QY 1561 TCCATCTCTCTCGAACCAAAATTTTCCACTTACAGATGACCCCTCAATCCCCATC 1620
Db |||||
QY 1561 TCCATCTCTCTCGAACCAAAATTTTCCACTTACAGATGACCCCTCAATCCCCATC 1620
Db |||||
QY 1621 AATAAGTGGGTCCAGGAAACCGGCATAGCCCGCTTATTTGGGTTTCTACAAATAGAGAG 1680
Db |||||
QY 1621 AATAAGTGGGTCCAGGAAACCGGCATAGCCCGCTTATTTGGGTTTCTACAAATAGAGAG 1680
Db |||||
QY 1681 AAATCCCAAGAACAAACACCCAGATGGAATTTTGGAGCAATGTGGTTGTTTTTGGCTGC 1740
Db |||||
QY 1681 AAATCCCAAGAACAAACACCCAGATGGAATTTTGGAGCAATGTGGTTGTTTTTGGCTGC 1740
Db |||||
QY 1741 AGGCATTAAGGATAGGATTTATCTATTTCAGAAAGAGCTCAGACATTTCCCTTAAGCATGG 1800
Db |||||
QY 1741 AGGCATTAAGGATAGGATTTATCTATTTCAGAAAGAGCTCAGACATTTCCCTTAAGCATGG 1800
Db |||||
QY 1801 ATCTTTAACTCATCTAAAGTTTCTTCTCAAGAGATGCTCTTGTGGGAGGAGGAAGCC 1860
Db |||||
QY 1801 ATCTTTAACTCATCTAAAGTTTCTTCTCAAGAGATGCTCTTGTGGGAGGAGGAAGCC 1860
Db |||||
QY 1861 CCAGCAAGTATGTACAGAACATCCAGTTCATGGCCAGCAGGTCGCGAGATTCCTC 1920
Db |||||
QY 1861 CCAGCAAGTATGTACAGAACATCCAGTTCATGGCCAGCAGGTCGCGAGATTCCTC 1920
Db |||||
QY 1921 CTTCCAGGAGAACGCCCATATTTATGTGTGAGATGCAAGAAATATGCCCAGGATGTA 1980
Db |||||
QY 1921 CTTCCAGGAGAACGCCCATATTTATGTGTGAGATGCAAGAAATATGCCCAGGATGTA 1980
Db |||||
QY 1981 CATGATGCCCTTGTGCAATAAATAAGCAAGAGTTTGGAGTTTGAATAAATAGAACCAATG 2040
Db |||||
QY 1981 CATGATGCCCTTGTGCAATAAATAAGCAAGAGTTTGGAGTTTGAATAAATAGAACCAATG 2040
Db |||||
QY 2041 AAAACCTCGGCCACTTTTAAAGAGAAACCGCTACCTTCAGGATATTTGGTCATAA 2097
Db |||||
QY 2041 AAAACCTCGGCCACTTTTAAAGAGAAACCGCTACCTTCAGGATATTTGGTCATAA 2097
Db |||||

[illegible]

QY 1741 AGGCATAAGGATAGGATTATCTATTTCAGAAAGAGCTCAGACATTTTCCTTAAGCATGG 1800
Db 1741 AGGCATAAGGATAGGATTATCTATTTCAGAAAGAGCTCAGACATTTTCCTTAAGCATGG 1800
QY 1801 ATCTTAACTCATCTAAAGGTTTCCTTCTCAAGAGATGCTCCCTGTTGGGAGGAGGAAGCC 1860
Db 1801 ATCTTAACTCATCTAAAGGTTTCCTTCTCAAGAGATGCTCCCTGTTGGGAGGAGGAAGCC 1860
QY 1861 CCAGCAAAATGATGTAACAAGCAACATCCAGCTTCATGGCCAGCAGTGGCGGAGATCCCTC 1920
Db 1861 CCAGCAAAATGATGTAACAAGCAACATCCAGCTTCATGGCCAGCAGTGGCGGAGATCCCTC 1920
QY 1921 CTCCTAGGAGACGGCCATATTTATGTGTGGAGATGCAAGATATGCCCAGGATGTA 1980
Db 1921 CTCCTAGGAGACGGCCATATTTATGTGTGGAGATGCAAGATATGCCCAGGATGTA 1980
QY 1981 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGMAAAACTAGAAAGCAATG 2040
Db 1981 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGMAAAACTAGAAAGCAATG 2040
QY 2041 AAAACCTCGCCACTTTAAAAGAGAAAAACGCTACCTCAGGATATTTGGTCATAA 2097
Db 2041 AAAACCTCGCCACTTTAAAAGAGAAAAACGCTACCTCAGGATATTTGGTCATAA 2097

RESULT 3
US-09-371-347-24
; Sequence 24, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-24

Query Match 100.0%; Score 2097; DB 10; Length 3259;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2097; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGAGGAGGTTTCTGTACTATATGCTACACAGCAGGACAGCAAGGCCATCGCAGAA 60
Db 80 ATGAGGAGGTTTCTGTACTATATGCTACACAGCAGGACAGCAAGGCCATCGCAGAA 139
QY 61 GAAATGTGTAGCAAGCTGTGTACATGGATTTTCTGCAGATCTTCACTGTATTAGTGAA 120
Db 140 GAAATGTGTAGCAAGCTGTGTACATGGATTTTCTGCAGATCTTCACTGTATTAGTGAA 199
QY 121 TCCGATAAGTATGACCTTAAACCGAAACAGCTCCTCTGTGTGTGTGTTTCTACACG 180
Db 200 TCCGATAAGTATGACCTTAAACCGAAACAGCTCCTCTGTGTGTGTGTTTCTACACG 259
QY 181 GGCACCGGAGACCCACCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 260 GGCACCGGAGACCCACCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 319
QY 241 CTGCCGGTGTGATTTCTTTGTCTACCTGCGGTATGGGTCTCGGTGATTAGTAA 300
Db 320 CTGCCGGTGTGATTTCTTTGTCTACCTGCGGTATGGGTCTCGGTGATTAGTAA 379

QY 301 TACACCTACTTTTGCNAATGGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC 360
Db 380 TACACCTACTTTTGCNAATGGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC 439
QY 361 CGGCATTTCTATGACACATGACATGACATGACTGTGTAGGTTTAGAACTTGTGGTTGAG 420
Db 440 CGGCATTTCTATGACACATGACATGACATGACTGTGTAGGTTTAGAACTTGTGGTTGAG 499
QY 421 CGCTGGATTGCTGGACTCTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA 480
Db 500 CGCTGGATTGCTGGACTCTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA 559
QY 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGTCATCTTGGAGCAGACCTTGTG 540
Db 560 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGTCATCTTGGAGCAGACCTTGTG 619
QY 541 AAGTCAGAGCTCTCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
Db 620 AAGTCAGAGCTCTCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 679
QY 601 AGAAAGGATTCTGAGGTTTGAAGCAAAATGCAAGTGAAACAGCAACCAATCCAAATGTTGTA 660
Db 680 AGAAAGGATTCTGAGGTTTGAAGCAAAATGCAAGTGAAACAGCAACCAATCCAAATGTTGTA 739
QY 661 ATTTGAGACTTTGAGTCTCTACTTACCCTGTCGTTACCCCTCTCTCAAGCCTCTCTG 720
Db 740 ATTTGAGACTTTGAGTCTCTACTTACCCTGTCGTTACCCCTCTCTCAAGCCTCTCTG 799
QY 721 AATATTTCTGTGTTTACCCCAAGATATTTACAGGTACATCTCGAGGAGTCTCTTGGCCAG 780
Db 800 AATATTTCTGTGTTTACCCCAAGATATTTACAGGTACATCTCGAGGAGTCTCTTGGCCAG 859
QY 781 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCTTCAAGTTC 840
Db 860 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCTTCAAGTTC 919
QY 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTCTGTTAGAAATTTGGACATT 900
Db 920 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTCTGTTAGAAATTTGGACATT 979
QY 901 TCAAAATACAGACTTTTCTTATCAGCCTGGAGATGCTTTCAGCGTGTATCTGCCCTAACAGT 960
Db 980 TCAAAATACAGACTTTTCTTATCAGCCTGGAGATGCTTTCAGCGTGTATCTGCCCTAACAGT 1039
QY 961 GATTTGAGGTACAAAGCCCTACTCCAAAGACTGACGCTTGAAGATTAAGAGAGGACTGC 1020
Db 1040 GATTTGAGGTACAAAGCCCTACTCCAAAGACTGACGCTTGAAGATTAAGAGAGGACTGC 1099
QY 1021 GTCCCTTTGAAAATAAAGGCAGACACAAAGAGAAAGGAGCTACCTTTACCCAGCATATA 1080
Db 1100 GTCCCTTTGAAAATAAAGGCAGACACAAAGAGAAAGGAGCTACCTTTACCCAGCATATA 1159
QY 1081 CTGCGGGATGTTCTCTCCAGTTCAITTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Db 1160 CTGCGGGATGTTCTCTCCAGTTCAITTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1219
QY 1141 AAAAGGCAATTTTGGGAGCCCTTGTGACTATACAGTGACAGTCTGAAAAGCCGAGG 1200
Db 1220 AAAAGGCAATTTTGGGAGCCCTTGTGACTATACAGTGACAGTCTGAAAAGCCGAGG 1279
QY 1201 CTACAGGAGCTGTGAGTAAACAAGGGCAGCCGATTATAGCGCTTCTGTACGAGATGCC 1260
Db 1280 CTACAGGAGCTGTGAGTAAACAAGGGCAGCCGATTATAGCGCTTCTGTACGAGATGCC 1339
QY 1261 TGTGCTGTCTGTGTGGATCTCTCTCGCTTTTCCCTTCTTGGCAGCAGCAGCTCAGTCTC 1320
Db 1340 TGTGCTGTCTGTGTGGATCTCTCTCGCTTTTCCCTTCTTGGCAGCAGCAGCTCAGTCTC 1399
QY 1321 CTGCTCGAATCTCTTCTTAAATCTTAAACCCAGACCATATTTGTTGTCAGAGCTCAAGTTTA 1380
Db 1400 CTGCTCGAATCTCTTCTTAAATCTTAAACCCAGACCATATTTGTTGTCAGAGCTCAAGTTTA 1459

1381 QY TTTACCCAGGAAGAGCTCAATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
1460 Db TTTACCCAGGAAGAGCTCAATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1519
1441 QY ACAGAGGTTCTCGGGAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTTGCTTCAGTT 1500
1520 Db ACAGAGGTTCTCGGGAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTTGCTTCAGTT 1579
1501 QY CTTAGCCAAACATACATGCATCCCATGAAGCAGCGGGAAGCCCTGGCTCCTTAAGATA 1560
1580 Db CTTAGCCAAACATACATGCATCCCATGAAGCAGCGGGAAGCCCTGGCTCCTTAAGATA 1639
1561 QY TCATCTCTCTCGAACAACAATTTCTTCCACTTACAGATGACCCCTCAATTCGCCATC 1620
1640 Db TCATCTCTCTCGAACAACAATTTCTTCCACTTACAGATGACCCCTCAATTCGCCATC 1699
1621 QY ATAAATGGTGGTCCAGGAACCGGCATAGCCCGTTTATTGGGTTCTTCAACATAGAGAG 1680
1700 Db ATAAATGGTGGTCCAGGAACCGGCATAGCCCGTTTATTGGGTTCTTCAACATAGAGAG 1759
1681 QY AAACCTCAAGAAACAACAACCCAGATGGAAATTTTGGAGCAATGTGTTGTTTGGCTGC 1740
1760 Db AAACCTCAAGAAACAACAACCCAGATGGAAATTTTGGAGCAATGTGTTGTTTGGCTGC 1819
1741 QY AGGCATAAGGATAGGATTTATCTATTTCAGAAAGAGCTCAGACATTTTCTTAAGCATGGG 1800
1820 Db AGGCATAAGGATAGGATTTATCTATTTCAGAAAGAGCTCAGACATTTTCTTAAGCATGGG 1879
1801 QY ATCTTAACTCATTAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAGCC 1860
1880 Db ATCTTAACTCATTAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAGCC 1939
1861 QY CCAGCAAGATGTATCAAGACAACATCCAGCTTCATGGCCAGCAGGTGGCGGAGATCCCTC 1920
1940 Db CCAGCAAGATGTATCAAGACAACATCCAGCTTCATGGCCAGCAGGTGGCGGAGATCCCTC 1999
1921 QY CTTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGCCCAGGATGTA 1980
2000 Db CTTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGCCCAGGATGTA 2059
1981 QY CATGATGCCCTGTGCAATATATAGCAAGAGGTTGGAGTTGAAAACATAGAACCAATG 2040
2060 Db CATGATGCCCTGTGCAATATATAGCAAGAGGTTGGAGTTGAAAACATAGAACCAATG 2119
2041 QY AAAACCTCGCCACTTTAAAAGAAAGAAAACGCTACCTTCAGGATATTTGGTCATAA 2097
2120 Db AAAACCTCGCCACTTTAAAAGAAAGAAAACGCTACCTTCAGGATATTTGGTCATAA 2176

RESULT 4
US-10-450-763-874
; Sequence 874, Application US/10450763
; Publication No. US20050196754A1
; GENERAL INFORMATION:
; APPLICANT: Hyseq, Inc
; TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
; FILE REFERENCE: 790CIP3/US
; CURRENT APPLICATION NUMBER: US/10/450,763
; CURRENT FILING DATE: 2003-06-11
; PRIOR APPLICATION NUMBER: PCT/US01/08631
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/540,217
; PRIOR FILING DATE: 2000-03-31
; PRIOR APPLICATION NUMBER: 09/649,167
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 60736
; SOFTWARE: Custom
; SEQ ID NO 874
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SIMILAR

; LOCATION: (80)...(2173)
; OTHER INFORMATION: 100% homologous to Homo sapiens methionine synthase
; OTHER INFORMATION: reductase, accession number AF025794, Smith-Waterman Score=3624.
US-10-450-763-874

Query Match 100.0%; Score 2097; DB 24; Length 3259;

Best Local Similarity 100.0%; Pred. No. 0;
Matches 2097; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGAGGAGGTTTCTGTACTATATGCTACACAGCAGGAGCAGGCAAGGCCATCGCAGAA 60
Db 80 ATGAGGAGGTTTCTGTACTATATGCTACACAGCAGGAGCAGGCAAGGCCATCGCAGAA 139
QY 61 GAAATGTGTAGCAAGCTGTGTACATGGATTTTCTGCAGATCTTTCACATGTTATTAGTAA 120
Db 140 GAAATGTGTAGCAAGCTGTGTACATGGATTTTCTGCAGATCTTTCACATGTTATTAGTAA 199
QY 121 TCCGATATAGTATGACTTAACACCGAAGACAGCTCTCTGTTGTTGTTGTTCTTACCAG 180
Db 200 TCCGATATAGTATGACTTAACACCGAAGACAGCTCTCTGTTGTTGTTGTTCTTACCAG 259
QY 181 GGCACCGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 260 GGCACCGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 319
QY 241 CTGCCGTTGATTTCTTTGCTCACCTGCGGTATGGGTTACTCGGTCTCGGTGATTAGAA 300
Db 320 CTGCCGTTGATTTCTTTGCTCACCTGCGGTATGGGTTACTCGGTCTCGGTGATTAGAA 379
QY 301 TACACCTACTTTGCAATGGGGGAAGATATTTGATTAACGACTTCAAGAGCTTGGAGCC 360
Db 380 TACACCTACTTTGCAATGGGGGAAGATATTTGATTAACGACTTCAAGAGCTTGGAGCC 439
QY 361 CGGCATTTCTATGACACTGGACATCAGATGACTGTAGTGTAGGTTTAAAGCTTGTAG 420
Db 440 CGGCATTTCTATGACACTGGACATCAGATGACTGTAGTGTAGGTTTAAAGCTTGTAG 499
QY 421 CGGTGGATTTGTGACTCTGCGCCAGCCCTCAGAAAAGCATTTTGTAGGTCAAGCAGAGCAA 480
Db 500 CGGTGGATTTGTGACTCTGCGCCAGCCCTCAGAAAAGCATTTTGTAGGTCAAGCAGAGCAA 559
QY 481 GAGGAGATAGTGGGCGACTCCCGTGGCATCACCTGCATCCTTGAGGACAGACCTTGTG 540
Db 560 GAGGAGATAGTGGGCGACTCCCGTGGCATCACCTGCATCCTTGAGGACAGACCTTGTG 619
QY 541 AAGTCAGAGCTGCTACACATTCGAATCTCAAGTCGAGCTTCTCAGATTCGATGATTGAG 600
Db 620 AAGTCAGAGCTGCTACACATTCGAATCTCAAGTCGAGCTTCTCAGATTCGATGATTGAG 679
QY 601 AGAAAGGATTTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 660
Db 680 AGAAAGGATTTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 739
QY 661 ATTGAAGCTTTGAGTCTCTACTTACCGTTCCGTTACCCCACTCTCACAAGCCTCTCTG 720
Db 740 ATTGAAGCTTTGAGTCTCTACTTACCGTTCCGTTACCCCACTCTCACAAGCCTCTCTG 799
QY 721 AATATTTCTGTTTACCCCAAGATTTTACAGGTACATCTCGAGGAGTCTCTTGGCCAG 780
Db 800 AATATTTCTGTTTACCCCAAGATTTTACAGGTACATCTCGAGGAGTCTCTTGGCCAG 859
QY 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCTTCAAG 840
Db 860 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCTTCAAG 919
QY 841 GCAGTTCAACTTACTACGAAATGATGCGCATAAAAACCACTCTGCTGTTAGAAATGGACAT 900
Db 920 GCAGTTCAACTTACTACGAAATGATGCGCATAAAAACCACTCTGCTGTTAGAAATGGACAT 979
QY 901 TCAAAATACAGACTTTTCTTATCAGCTGGAGATGCTTCAGGCTGATCTGCCCTAACAGT 960
Db 980 TCAAAATACAGACTTTTCTTATCAGCTGGAGATGCTTCAGGCTGATCTGCCCTAACAGT 1039

QY 961 GATCTCTGAGGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATATAAAGAGAGACTGC 1020
DB 1040 GATCTGAGGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATATAAAGAGAGACTGC 1099
QY 1021 GTCTTTTGAATAAAGCAGACACAAAGAGAAAGAGAGCTACCTTACCCAGCATATA 1080
DB 1100 GTCTTTTGAATAAAGCAGACACAAAGAGAAAGAGAGCTACCTTACCCAGCATATA 1159
QY 1081 CTGCGGGATGTCTCTCAGTTCATTTTACTGTGTGTTGAATCCGAGCAATCTCT 1140
DB 1160 CTGCGGGATGTCTCTCAGTTCATTTTACTGTGTGTTGAATCCGAGCAATCTCT 1219
QY 1141 AAAAGGCAATTTTGGAGCCCTTGGACTATACCAAGTACAGTGACAGTCTGCTGAAAAGCCAGG 1200
DB 1220 AAAAGGCAATTTTGGAGCCCTTGGAGCTATACCAAGTACAGTGACAGTCTGCTGAAAAGCCAGG 1279
QY 1201 CTACAGGAGCTGTGCAAGTAAACAAGGGGAGCGGATATTAGCGGCTTTGTACGAGATGCC 1260
DB 1280 CTACAGGAGCTGTGCAAGTAAACAAGGGGAGCGGATATTAGCGGCTTTGTACGAGATGCC 1339
QY 1261 TGTGCTGCTGTTGTGATCTCTCTCGCTTTCCCTTTCTTGGCAGCACCACCTCAGTCTC 1320
DB 1340 TGTGCTGCTGTTGTGATCTCTCTCGCTTTCCCTTTCTTGGCAGCACCACCTCAGTCTC 1399
QY 1321 CTGCTCGAATCTTCTTAAACTTCAACCCAGACCATATTTCGTGTCAGACTCAAGTTTA 1380
DB 1400 CTGCTCGAATCTTCTTAAACTTCAACCCAGACCATATTTCGTGTCAGACTCAAGTTTA 1459
QY 1381 TTTTACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
DB 1460 TTTTACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1519
QY 1441 ACAGAGTTCTCGGGAAGGAGTATGTACAGGCTGCTGCGCTTGTGTTGTTGCTCAGTT 1500
DB 1520 ACAGAGTTCTCGGGAAGGAGTATGTACAGGCTGCTGCGCTTGTGTTGTTGCTCAGTT 1579
QY 1501 CTTTACCCAAACATACATGATCCCATGAAGCAGCGGAAAGCCCTGCTCCTTAAGATA 1560
DB 1580 CTTTACCCAAACATACATGATCCCATGAAGCAGCGGAAAGCCCTGCTCCTTAAGATA 1639
QY 1561 TCCATCTCTCCTCGAAACAAATTTCTTCCACTTACAGATGACCCCTCAATFCCCATC 1620
DB 1640 TCCATCTCTCCTCGAAACAAATTTCTTCCACTTACAGATGACCCCTCAATFCCCATC 1699
QY 1621 ATAAATGGTGGTCCAGAACCCGATAGCCCCGTTTATGGGTTCTTCAACATAGAG 1680
DB 1700 ATAAATGGTGGTCCAGAACCCGATAGCCCCGTTTATGGGTTCTTCAACATAGAG 1759
QY 1681 AAACCTCAAAGAACACACCCAGATGGAATTTTGGAGCAATGTGTTGTTTTGGCTGC 1740
DB 1760 AAACCTCAAAGAACACACCCAGATGGAATTTTGGAGCAATGTGTTGTTTTGGCTGC 1819
QY 1741 AGGCATAAGGATAGGATTTATCTATTTCAGAAAAGAGCTCAGACATTTTCCCTTAAGCATGG 1800
DB 1820 AGGCATAAGGATAGGATTTATCTATTTCAGAAAAGAGCTCAGACATTTTCCCTTAAGCATGG 1879
QY 1801 ATCTTAACTCATCTTAAAGGTTTCCCTTCTCAAGAGATGCTCCTGTGGGGAGGAGAGCC 1860
DB 1880 ATCTTAACTCATCTTAAAGGTTTCCCTTCTCAAGAGATGCTCCTGTGGGGAGGAGAGCC 1939
QY 1861 CCAGCAAGTATGTACAAGACAACATCCAGCTTTCATGGCCAGCAGGTGGCGAGAACTCTC 1920
DB 1940 CCAGCAAGTATGTACAAGACAACATCCAGCTTTCATGGCCAGCAGGTGGCGAGAACTCTC 1999
QY 1921 CTCAGGAGAACGGCCATTTTATGTGTGGAGATGCAAAAGAAATATGGCCAAAGGATGTA 1980
DB 2000 CTCAGGAGAACGGCCATTTTATGTGTGGAGATGCAAAAGAAATATGGCCAAAGGATGTA 2059
QY 1981 CATGATGCCCTTGTGCAATAATAAGCAAGAGGTTGGAGTTGAAAACCTAGAAAGCAATG 2040
DB 2060 CATGATGCCCTTGTGCAATAATAAGCAAGAGGTTGGAGTTGAAAACCTAGAAAGCAATG 2119
QY 2041 AAAACCTTGGCCACTTTTAAAGAAAGAAAACGCTACCTTCAGGATATTTTGGTCATAA 2097

DB 2120 AAAACCTGGCCACTTTTAAAGAAAGAAAACCTACCTTCAGGATATTTTGGTCATAA 2176

RESULT 5

US-11-119-096-24
; Sequence 24, Application US/111119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-24

Query Match 100.0%; Score 2097; DB 26; Length 3259;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2097; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGAGGAGGTTTCTGTTACTATATGCTACACAGCAGGAGCAGGCAAAAGCCATCGCAGAA 60
DB 80 ATGAGGAGGTTTCTGTTACTATATGCTACACAGCAGGAGCAGGCAAAAGCCATCGCAGAA 139
QY 61 GAAATGTGTGACAAAGCTGTGTACATGATTTCTGTCAGATCTTCACTGTATTAGTGAA 120
DB 140 GAAATGTGTGACAAAGCTGTGTACATGATTTCTGTCAGATCTTCACTGTATTAGTGAA 199
QY 121 TCCGATAAGTATGACTTAATAAAACCGAAACAGACTCCTCTTGTGTTGTTCTACACAG 180
DB 200 TCGATAGTATGACTTAATAAAACCGAAACAGACTCCTCTTGTGTTGTTCTACACAG 259
QY 181 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTTAAGGAAATACAGAAACCAACA 240
DB 260 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTTAAGGAAATACAGAAACCAACA 319
QY 241 CTGCGGTTGATTTCTTCTCCTCCTGCGGTATGGGTACTGCGTCTCGGTGATTCAGAA 300
DB 320 CTGCGGTTGATTTCTTCTCCTCCTGCGGTATGGGTACTGCGTCTCGGTGATTCAGAA 379
QY 301 TACACCTACTTTTGGCAATGGGGGAGAGATAATTGATAACGACTTCAAGAGCTTGGAGCC 360
DB 380 TACACCTACTTTTGGCAATGGGGGAGAGATAATTGATAACGACTTCAAGAGCTTGGAGCC 439
QY 361 CGGCATTTCTATGACACTCGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 420
DB 440 CGGCATTTCTATGACACTCGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 499
QY 421 CGGTGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAGAGCAGACAA 480
DB 500 CGGTGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAGAGCAGACAA 559
QY 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTTGCATCCTTTGAGGACAGACCTTGTG 540

560 Db GAGGAGATAAGTGGGCGCATCCCGTGGGCATCACCTGCATCTTTCAGGACAGACCTTGTG 619
541 QY AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
620 Db AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 679
601 QY AGAAGGATTTCTGAGGTTTGAAGCAAAATGAGTGAACAGCAACCAATTCGAATTTGTA 660
680 Db AGAAGGATTTCTGAGGTTTGAAGCAAAATGAGTGAACAGCAACCAATTCGAATTTGTA 739
661 QY ATTGAAGACTTTGAGTCTCACTTACCCGTTCCGTTACCCGCTCTCTCAAGCCCTCTCTG 720
740 Db ATTGAAGACTTTGAGTCTCACTTACCCGTTCCGTTACCCGCTCTCTCAAGCCCTCTCTG 799
721 QY AATATTTCTGTTTAAACCCGCAATATTTTACAGGTACATCTCGAGGAGTCTCTCGGCCAG 780
800 Db AATATTTCTGTTTAAACCCGCAATATTTTACAGGTACATCTCGAGGAGTCTCTCGGCCAG 859
781 QY GAGGAAAGCCAAAGTATCTGTGATCTTCAGCAGATCCAGTCTTTCAGTGGCAATTTCAAAG 840
860 Db GAGGAAAGCCAAAGTATCTGTGATCTTCAGCAGATCCAGTCTTTCAGTGGCAATTTCAAAG 919
841 QY GCAGTTCAACTTACTACGATATGCTGATGCTTAAACCACTCTCTGTTAGATTTGACATTT 900
920 Db GCAGTTCAACTTACTACGATATGCTGATGCTTAAACCACTCTCTGTTAGATTTGACATTT 979
901 QY TCAATATACAGACTTTTCTTATCAGCTGAGATGCTTTCAGGCTGATCTGCTTAAACAGT 960
980 Db TCAATATACAGACTTTTCTTATCAGCTGAGATGCTTTCAGGCTGATCTGCTTAAACAGT 1039
961 QY GATTTCTGAGGTTCAAAAGCCTTCTCAAGACTGCTGAGTCTTGAAGTAAAGAGAGACACTGC 1020
1040 Db GATTTCTGAGGTTCAAAAGCCTTCTCAAGACTGCTGAGTCTTGAAGTAAAGAGAGACACTGC 1099
1021 QY GTCTTTTGAATAAAGCAGACACAAAGAGAAAGGAGCTACCTTACCCGAGCATATA 1080
1100 Db GTCTTTTGAATAAAGCAGACACAAAGAGAAAGGAGCTACCTTACCCGAGCATATA 1159
1081 QY CTGCGGGAGTGTCTCTCAGTTTCTTCTGATGCTTGAATTCGAGCAATTCCT 1140
1160 Db CTGCGGGAGTGTCTCTCAGTTTCTTCTGATGCTTGAATTCGAGCAATTCCT 1219
1141 QY AAAAAAGGCAATTTTTCGAGCCCTTGTGATATACAGTGCAGTCTGTAAGAGGCGCAGG 1200
1220 Db AAAAAAGGCAATTTTTCGAGCCCTTGTGATATACAGTGCAGTCTGTAAGAGGCGCAGG 1279
1201 QY CTACAGGAGCTGTGAGTAAACAAAGGGGAGCGGATATAGCGCTTTGTAGAGATGCC 1260
1280 Db CTACAGGAGCTGTGAGTAAACAAAGGGGAGCGGATATAGCGCTTTGTAGAGATGCC 1339
1261 QY TGTGCTGCTGTTGGATCTCTCTCTGCTTCTGCTTCTGCTGCTGCTGCTGCTGCTGCTC 1320
1340 Db TGTGCTGCTGTTGGATCTCTCTCTGCTTCTGCTTCTGCTGCTGCTGCTGCTGCTGCTC 1399
1321 QY CTGCTCGAATCTCTCTAACTTCAACCCAGACCATATTCGTTGCGAGCTCAAGTTTA 1380
1400 Db CTGCTCGAATCTCTCTAACTTCAACCCAGACCATATTCGTTGCGAGCTCAAGTTTA 1459
1381 QY TTTTACCCAGGAAGCTCAATTTGTCTTCAACATTTGGAAATTTCTGCTACTGCGACA 1440
1460 Db TTTTACCCAGGAAGCTCAATTTGTCTTCAACATTTGGAAATTTCTGCTACTGCGACA 1519
1441 QY ACAGAGGTTCTCGGAAGGAGTATGTACAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1500
1520 Db ACAGAGGTTCTCGGAAGGAGTATGTACAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1579
1501 QY CTTTCAGCCAAACATACATGATCCCATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1560
1580 Db CTTTCAGCCAAACATACATGATCCCATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1639
1561 QY TCCATCTCTCTCGAACAACAAATTTCTTCCATTTTACAGATGAGCCCTCAATTCGCCATTC 1620

1640 Db TCCATCTCTCTCGAACAACAAATTTCTTCCATTTACAGATGAGCCCTCAATTCGCCATC 1699
1621 QY ATAATGTGGGTTCAGGAACCGGCATAGCCCGCTTTATTTGGGTTTCTTACAAATAGAGAG 1680
1700 Db ATAATGTGGGTTCAGGAACCGGCATAGCCCGCTTTATTTGGGTTTCTTACAAATAGAGAG 1759
1681 QY AAATCTCAAGAACAAACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1740
1760 Db AAATCTCAAGAACAAACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1819
1741 QY AGGCATAAGGATAGGATTTCTATTTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
1820 Db AGGCATAAGGATAGGATTTCTATTTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGG 1879
1801 QY ATCTTAACTCATTAAGGTTTCTTCTCAAGAGATGCTTCTGTTGGGAGGAGGAAGCC 1860
1880 Db ATCTTAACTCATTAAGGTTTCTTCTCAAGAGATGCTTCTGTTGGGAGGAGGAAGCC 1939
1861 QY CCAGCAAAAGTATGTAACAAGACAAATCCAGCTTTCATGCGCAGCAGTGGCGAAGATCTCTC 1920
1940 Db CCAGCAAAAGTATGTAACAAGACAAATCCAGCTTTCATGCGCAGCAGTGGCGAAGATCTCTC 1999
1921 QY CTCCAGGAGAACGGCCATATTTATGTTGTGAGATGCAAGAAATATGSCCAAGATGTA 1980
2000 Db CTCCAGGAGAACGGCCATATTTATGTTGTGAGATGCAAGAAATATGSCCAAGATGTA 2059
1981 QY CATGATGCCCTTGTGCAAAATATAGCAAAAGAGTTGGAGTTGAAAACTAGAACAAATG 2040
2060 Db CATGATGCCCTTGTGCAAAATATAGCAAAAGAGTTGGAGTTGAAAACTAGAACAAATG 2119
2041 QY AAAACCTTGGCCACTTTTAAAAAGAAAAAAGCTACCTTTCAGGATATTTGGTCTATAA 2097
2120 Db AAAACCTTGGCCACTTTTAAAAAGAAAAAAGCTACCTTTCAGGATATTTGGTCTATAA 2176

RESULT 6

US-09-371-347-41
; Sequence 41, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE.
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-41

Query Match 99.9%; Score 2095.4; DB 10; Length 2097;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 ATGAGGAGTTTCTGTTACTATATGCTACAGAGGAGGACAGGCAAAAGGCCATCGCAGAA 60
Db 1 ATGAGGAGTTTCTGTTACTATATGCTACAGAGGAGGACAGGCAAAAGGCCATCGCAGAA 60
QY 61 GAAATGTGTGAGCAAGCTGTGTACATGATTTCTTCAGAGATCTTTCACGTATTAGTGAA 120
Db 61 GAAATGTGTGAGCAAGCTGTGTACATGATTTCTTCAGAGATCTTTCACGTATTAGTGAA 120
QY 121 TCCGATAGTATGACCTTAAAAACCCAAACAGCTCTCTGTTGTTGTTGTTTCTTACCAGC 180


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; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 43
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-43

Query Match
Best Local Similarity 99.9%; Score 2095.4; DB 10; Length 2097;
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGAGAGGTTCTGTACTATATATGCTACACAGCAGGACAGCAAAAGGCCATCCAGAA 60
DB 1 ATGAGAGGTTCTGTACTATATATGCTACACAGCAGGACAGCAAAAGGCCATCCAGAA 60

QY 61 GAAATGTGTGACNAGCTGTGTACATGATTTCTGCGAGATCTTCACGTATATTAGTAA 120
DB 61 GAAATGTGTGACNAGCTGTGTACATGATTTCTGCGAGATCTTCACGTATATTAGTAA 120

QY 121 TCCGATAAGTATGACCTAAACCCGAAACAGCTCTCTTTGTTGTTGTTGTTCTACCAAG 180
DB 121 TCCGATAAGTATGACCTAAACCCGAAACAGCTCTCTTTGTTGTTGTTGTTCTACCAAG 180

QY 121 TCCGATAAGTATGACCTAAACCCGAAACAGCTCTCTTTGTTGTTGTTGTTCTACCAAG 180
DB 121 TCCGATAAGTATGACCTAAACCCGAAACAGCTCTCTTTGTTGTTGTTGTTCTACCAAG 180

QY 181 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGGAAATACAGAACCAACA 240
DB 181 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGGAAATACAGAACCAACA 240

QY 241 CTGCGGTTGATTTCTTCTCCTACCTGCGGTATGGTTACTGGTCTCGGTGATTCAGAA 300
DB 241 CTGCGGTTGATTTCTTCTCCTACCTGCGGTATGGTTACTGGTCTCGGTGATTCAGAA 300

QY 301 TACACTACTTTTGCATGGGGGAGATAATTTGATAAACGACTTCAAGAGCTTGGAGCC 360
DB 301 TACACTACTTTTGCATGGGGGAGATAATTTGATAAACGACTTCAAGAGCTTGGAGCC 360

QY 361 CGGCATTTCTATGACACTGGACATGACATGCTGTGTAGTTTGAACCTTGTGTTGAG 420
DB 361 CGGCATTTCTATGACACTGGACATGACATGCTGTGTAGTTTGAACCTTGTGTTGAG 420

QY 421 CGGTGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGTCAAGCAGAGACAA 480
DB 421 CGGTGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGTCAAGCAGAGACAA 480

QY 481 GAGGAGATAAGTGGCGCACTCCGGTGGCATCACCTGTCATCTTGAAGCAGACCTTGTG 540
DB 481 GAGGAGATAAGTGGCGCACTCCGGTGGCATCACCTGTCATCTTGAAGCAGACCTTGTG 540

QY 541 AAGTCAGAGCTGCTACACATTGAACTCTAAGTCGAGCTTCTGAGATTCGATTCAGGA 600
DB 541 AAGTCAGAGCTGCTACACATTGAACTCTAAGTCGAGCTTCTGAGATTCGATTCAGGA 600

QY 601 AGAAGGATTTGAGTTTGAAGCAAAATGACGTGAAACAGCAACCAATCCAAATGTTGTA 660
DB 601 AGAAGGATTTGAGTTTGAAGCAAAATGACGTGAAACAGCAACCAATCCAAATGTTGTA 660

QY 661 ATTGAAGCTTTGAGTCTCCTTACCTACCGTTCGGTACCCCACTCTCACAAGCCTCTCTG 720
DB 661 ATTGAAGCTTTGAGTCTCCTTACCTACCGTTCGGTACCCCACTCTCACAAGCCTCTCTG 720

QY 721 AATATTTCTGGTTTACCCCAAGAAATTTTACAGGTACATCTGCGAGGCTCTCTTGGCCAG 780
DB 721 AATATTTCTGGTTTACCCCAAGAAATTTTACAGGTACATCTGCGAGGCTCTCTTGGCCAG 780

QY 781 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATTCAGTTTTCAGTGCCAAATTTCAAAG 840
DB 781 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATTCAGTTTTCAGTGCCAAATTTCAAAG 840

QY 841 GCAGTTTCACTTACGAAATGATGCAATAAACCACCTCTGCTGTAGAAATTTGGACATT 900
DB 841 GCAGTTTCACTTACGAAATGATGCAATAAACCACCTCTGCTGTAGAAATTTGGACATT 900

QY 901 TCAAATACAGACTTTTCTCTATCAGCCTCGAGATGCTTTCAGGTGATCTGCCCTAACAGT 960
DB 901 TCAAATACAGACTTTTCTCTATCAGCCTCGAGATGCTTTCAGGTGATCTGCCCTAACAGT 960

QY 961 GATTCGAGGTACAAAGCCTACTCCAAAGACTTGCAGCTTGAAGATAAAGAGCAGACTGC 1020
DB 961 GATTCGAGGTACAAAGCCTACTCCAAAGACTTGCAGCTTGAAGATAAAGAGCAGACTGC 1020

QY 1021 GTCCCTTTTGAATAAAGGACAGACACAAAGAGAAAGGAGCTTACCTTACCCAGCATATA 1080
DB 1021 GTCCCTTTTGAATAAAGGACAGACACAAAGAGAAAGGAGCTTACCTTACCCAGCATATA 1080

QY 1081 CCTCGGAGATTTCTCTCAGTTTCAATTTTACCTGCTGTCTTGAATTCGAGCAATTCCT 1140
DB 1081 CCTCGGAGATTTCTCTCAGTTTCAATTTTACCTGCTGTCTTGAATTCGAGCAATTCCT 1140

QY 1141 AAAAAGGCAATTTTTCGAGCCCTTGTGACTATACAGTGACAGTGCTGAAAAGCGCAG 1200
DB 1141 AAAAAGGCAATTTTTCGAGCCCTTGTGACTATACAGTGACAGTGCTGAAAAGCGCAG 1200

QY 1201 CTACAGGAGCTGTGAGTAAACAAAGGCGCAGCGGATTTAGCCGCTTTGTACGAGATGCC 1260
DB 1201 CTACAGGAGCTGTGAGTAAACAAAGGCGCAGCGGATTTAGCCGCTTTGTACGAGATGCC 1260

QY 1261 TGTGCTGCTTGTGAGATCTCTCTCGTTCCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1320
DB 1261 TGTGCTGCTTGTGAGATCTCTCTCGTTCCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1320

QY 1321 CTGCTCGAACATCTTCTTAACTTCAACCCAGACCATATTCGTGCGAGCTCAAGTTTAA 1380
DB 1321 CTGCTCGAACATCTTCTTAACTTCAACCCAGACCATATTCGTGCGAGCTCAAGTTTAA 1380

QY 1381 TTTTCAACCCAGGAAAGCTCCTTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
DB 1381 TTTTCAACCCAGGAAAGCTCCTTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440

QY 1441 ACAGAGTTCTGCGGAAAGGAGTATGATACAGCTGGCTGGCTTGTGTTGCTTCTCAGTT 1500
DB 1441 ACAGAGTTCTGCGGAAAGGAGTATGATACAGCTGGCTGGCTTGTGTTGCTTCTCAGTT 1500

QY 1501 CTTGACCCAAACATACATGCTCCATTCAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1560
DB 1501 CTTGACCCAAACATACATGCTCCATTCAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1560

QY 1561 TCCATCTCTCTCGAACCAACAAATTTCTTCCATTTACAGATGACCCCTCAATCCCAATC 1620
DB 1561 TCCATCTCTCTCGAACCAACAAATTTCTTCCATTTACAGATGACCCCTCAATCCCAATC 1620

QY 1621 AFAATGGTGGTTCAGGAAACCGGCATAGCCCGTTTATTTGGTTCCTTCAACATAGAGAG 1680
DB 1621 AFAATGGTGGTTCAGGAAACCGGCATAGCCCGTTTATTTGGTTCCTTCAACATAGAGAG 1680

QY 1681 AAATCCCAAGACACACCCAGATGGAATTTTGGAGCAATGCTGTTTGTGTTTGGCTGC 1740
DB 1681 AAATCCCAAGACACACCCAGATGGAATTTTGGAGCAATGCTGTTTGTGTTTGGCTGC 1740

QY 1741 AGGCAATAAGGATAGGATTTATCTATTAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
DB 1741 AGGCAATAAGGATAGGATTTATCTATTAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1800

QY 1801 ATCTTAACTCAATTAAGGTTTCTTCTCAAGAGATGCTCTCTTGGGAGGAGGAGCC 1860
DB 1801 ATCTTAACTCAATTAAGGTTTCTTCTCAAGAGATGCTCTCTTGGGAGGAGGAGCC 1860

QY 1861 CCAGCAAGTATGTAAGACACACATCCAGCTTCAATGGCCAGCAGGTGGCGAGATCTCTC 1920
DB 1861 CCAGCAAGTATGTAAGACACACATCCAGCTTCAATGGCCAGCAGGTGGCGAGATCTCTC 1920

QY 1921 TCTCCAGGAGAACCGGCATATTTATGTTGTGAGATGCAAGAAATATGGCCAGAGATGTA 1980
DB 1921 TCTCCAGGAGAACCGGCATATTTATGTTGTGAGATGCAAGAAATATGGCCAGAGATGTA 1980

QY 1981 CATGATGCCCTTGTGCAATTAATAAGCAAGAGGTTGGAGTTGAAAAAATTAGAACAAATG 2040
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Db 1981 CATGATGCCCTTGTGCAATAATAGCAAGAGTTGGAGTTGAAAACATAGAACATG 2040
QY 2041 AAAACCTGGCCACTTTAAAGAAAGAAAACGCTACCTTCAGATATTTGGTCATAA 2097
Db 2041 AAAACCTGGCCACTTTAAAGAAAGAAAACGCTACCTTCAGATATTTGGTCATAA 2097
RESULT 8
US-11-119-096-41
; Sequence 41, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-41
Query Match 99.9%; Score 2095.4; DB 26; Length 2097;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 ATGAGAGGTTTCTGTACTATATGTACACAGCAGGACAGCAAGGCCATCGCAGAA 60
Db 1 ATGAGAGGTTTCTGTACTATATGTACACAGCAGGACAGCAAGGCCATCGCAGAA 60
QY 61 GAAATGTGTAGCAAGCTGTGGTACATGGATTTCTGCGAGATCTTCACTGTATTAGTGAA 120
Db 61 GAAATGTGTAGCAAGCTGTGGTACATGGATTTCTGCGAGATCTTCACTGTATTAGTGAA 120
QY 121 TCCGATAAGTATGACCTAAAAACCGAAACAGCTCCTCTTGTGTGTGTGTCTTACCAG 180
Db 121 TCCGATAAGTATGACCTAAAAACCGAAACAGCTCCTCTTGTGTGTGTGTCTTACCAG 180
QY 181 GGCACCGAGACCCACCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAAAACA 240
Db 181 GGCACCGAGACCCACCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAAAACA 240
QY 241 CTGCGGGTTGATTTCTTGTCTACCTCGCGTATGGGTACTGGGTCTCGGTGATTTCAGAA 300
Db 241 CTGCGGGTTGATTTCTTGTCTACCTCGCGTATGGGTACTGGGTCTCGGTGATTTCAGAA 300
QY 301 TACACCTACTTTTGCATGGGGGGAAGATAAATGATAAAGCACTTCAAGAGCTTGGAGCC 360
Db 301 TACACCTACTTTTGCATGGGGGGAAGATAAATGATAAAGCACTTCAAGAGCTTGGAGCC 360
QY 361 CGGCATTTCTATGACACTGACATGACATGACTGTGTAGGTTTAGAACTTGTGGTTGAG 420
Db 361 CGGCATTTCTATGACACTGACATGACATGACTGTGTAGGTTTAGAACTTGTGGTTGAG 420
QY 421 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA 480

Db 421 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA 480
QY 481 GAGGAGATAAGTGGCGCACTCCGGTGGCATCACTGATCTTGGAGACAGACCTTGTG 540
Db 481 GAGGAGATAAGTGGCGCACTCCGGTGGCATCACCTGATCTTGGAGACAGACCTTGTG 540
QY 541 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGA 600
Db 541 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGA 600
QY 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGAGTGAAACAGCAACCAATCCAATGTTGA 660
Db 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGAGTGAAACAGCAACCAATCCAATGTTGA 660
QY 661 ATTGAAGACTTTTGAAGTCTCACTTACCGTTCGGTACCCCACTCTCAAGCCTCTCTG 720
Db 661 ATTGAAGACTTTTGAAGTCTCACTTACCGTTCGGTACCCCACTCTCAAGCCTCTCTG 720
QY 721 AATATTCCTGGTTTACCCCAAGATATTTACAGGTACATCTGCGAGAGTCTCTTGGCCAG 780
Db 721 AATATTCCTGGTTTACCCCAAGATATTTACAGGTACATCTGCGAGAGTCTCTTGGCCAG 780
QY 781 GAGGAAAGCCAAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCATTTCAAAG 840
Db 781 GAGGAAAGCCAAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCATTTCAAAG 840
QY 841 GCAGTTCAACTTTACTACGAATGATGCCATAAAAAACCACTCTCTGTGTAGATTTGGACAT 900
Db 841 GCAGTTCAACTTTACTACGAATGATGCCATAAAAAACCACTCTCTGTGTAGATTTGGACAT 900
QY 901 TCAATATACAGACTTTTCTATCAGCTGGAGATGCTTCAGCGTATCTGCCCTAACAGT 960
Db 901 TCAATATACAGACTTTTCTATCAGCTGGAGATGCTTCAGCGTATCTGCCCTAACAGT 960
QY 961 GATTTCTGAGGTACAAAGCCTACTCCAAAGACTTGACGTGGAAGATAAAAGAGAGCACTGC 1020
Db 961 GATTTCTGAGGTACAAAGCCTACTCCAAAGACTTGACGTGGAAGATAAAAGAGAGCACTGC 1020
QY 1021 GTCTTTTGAATAAAGCAGACACAAAGAAAGAGAGCTTACCTTACCCAGCATATA 1080
Db 1021 GTCTTTTGAATAAAGCAGACACAAAGAAAGAGAGCTTACCTTACCCAGCATATA 1080
QY 1081 CTGCGGGATGTTCTCCAGTTTCAATTTTACCTGCTGTGTAATCCGACCAATTCCT 1140
Db 1081 CTGCGGGATGTTCTCCAGTTTCAATTTTACCTGCTGTGTAATCCGACCAATTCCT 1140
QY 1141 AAAAAAGGCATTTTTCGAGCCCTTGTGACTATACAGTGACAGTCTGAAAAGCGCAGS 1200
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QY 1201 CTACAGGAGCTGTGAGTAAACAAAGGGCAGCCGATATTAGCCGCTTTGTAGAGATGCC 1260
Db 1201 CTACAGGAGCTGTGAGTAAACAAAGGGCAGCCGATATTAGCCGCTTTGTAGAGATGCC 1260
QY 1261 TGTGCTGCTTGTGAGTCTCCTCCTGCTTTCCCTTTCTTGGCAGCAGCACTCAGTCTC 1320
Db 1261 TGTGCTGCTTGTGAGTCTCCTCCTGCTTTCCCTTTCTTGGCAGCAGCACTCAGTCTC 1320
QY 1321 CTGCTCGAATCTTCTCTAAACCTTCAACCCAGACCATATTTCTGTGTCAGAGCTCAAGTTTA 1380
Db 1321 CTGCTCGAATCTTCTCTAAACCTTCAACCCAGACCATATTTCTGTGTCAGAGCTCAAGTTTA 1380
QY 1381 TTTTCAACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
Db 1381 TTTTCAACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
QY 1441 ACAGAGTTCTCGGAGGAGTATGTAACAGGCTGGCTTGTGGTTGCTTGTGTTTGTGTTT 1500
Db 1441 ACAGAGTTCTCGGAGGAGTATGTAACAGGCTGGCTTGTGGTTGCTTGTGTTTGTGTTT 1500
QY 1501 CTTTACGCCAAAACATACATGATCCCATGAAGACAGCGGGAAGCCCTTGTGCTCCTAAGATA 1560

1081 CCTCGGGATGTTCTCTCCAGTTTCATTTTACCTGGTGCTTGAAATCCGACAAATTCCT 1140
1081 CCTCGGGATGTTCTCTCCAGTTTCATTTTACCTGGTGCTTGAAATCCGACAAATTCCT 1140
1141 AAAAAGGCATTTTTCGAGCCCTTGTGGACTATPACCAAGTGACAGTCTCTGAAAAGCGCAGG 1200
1141 AAAAAGGCATTTTTCGAGCCCTTGTGGACTATPACCAAGTGACAGTCTCTGAAAAGCGCAGG 1200
1201 CTACAGAGCTGTGCAAGTAAACAAAGGGGACGCGATATAGCCGCTTTGTACAGATGCC 1260
1201 CTACAGAGCTGTGCAAGTAAACAAAGGGGACGCGATATAGCCGCTTTGTACAGATGCC 1260
1261 TGTGCTGCTGTGTGGATCTCTCCCTGCTTTCCCTTTCTTGGCAGGCACCACTCACTCTC 1320
1261 TGTGCTGCTGTGTGGATCTCTCCCTGCTTTCCCTTTCTTGGCAGGCACCACTCACTCTC 1320
1321 CTGCTCGAACATCTTCTTAAACTTCAACCCAGACCAATATTCGTGTGCAAGCTCAAGTTTA 1380
1321 CTGCTCGAACATCTTCTTAAACTTCAACCCAGACCAATATTCGTGTGCAAGCTCAAGTTTA 1380
1381 TTTCACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
1381 TTTCACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
1441 ACAGAGGTTCTGGGAAGGAGTATGTACAGGCTGGCTGGCTTTGTTGGTTCCTTCAGTT 1500
1441 ACAGAGGTTCTGGGAAGGAGTATGTACAGGCTGGCTGGCTTTGTTGGTTCCTTCAGTT 1500
1501 CTTTACGCCAAACATACATGATCCCATGAAGACAGCGGGAAGCCCTGGCTCTCTAAGATA 1560
1501 CTTTACGCCAAACATACATGATCCCATGAAGACAGCGGGAAGCCCTGGCTCTCTAAGATA 1560
1561 TCCATCTCTCTCGAACACAAATTTCTTCCATTTACAGATGACCCCTCAATFCCCATC 1620
1561 TCCATCTCTCTCGAACACAAATTTCTTCCATTTACAGATGACCCCTCAATFCCCATC 1620
1621 ATAAATGGTGGTCCAGAACCCGATAGCCCGTTTATTTGGGTTCTTCAACATAGAGAG 1680
1621 ATAAATGGTGGTCCAGAACCCGATAGCCCGTTTATTTGGGTTCTTCAACATAGAGAG 1680
1681 AAACCTCCAGAAACAAACACCCAGATGGAATTTTGGAGCAATGTGGTTTGTGGCTGC 1740
1681 AAACCTCCAGAAACAAACACCCAGATGGAATTTTGGAGCAATGTGGTTTGTGGCTGC 1740
1741 AGGCATAAGATAGGATTAATCTATTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1800
1741 AGGCATAAGATAGGATTAATCTATTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1800
1801 ATCTTAACCTCATCTAAGGTTTCTTCTCAAGAGATGCTCCTGTGGGAGGAGGAGCC 1860
1801 ATCTTAACCTCATCTAAGGTTTCTTCTCAAGAGATGCTCCTGTGGGAGGAGGAGCC 1860
1861 CCAGCAAGATATGTACAAAGACACATCCAGCTTCATGGCCAGCAGGTGGCGAATCCTC 1920
1861 CCAGCAAGATATGTACAAAGACACATCCAGCTTCATGGCCAGCAGGTGGCGAATCCTC 1920
1921 CTCACAGAGAACCGGCCATATTTATGTGTGGAGATGCAAAAGAAATATGGCCAAAGGATGA 1980
1921 CTCACAGAGAACCGGCCATATTTATGTGTGGAGATGCAAAAGAAATATGGCCAAAGGATGA 1980
1981 CATGATGCCCTTGTGCATAATAATAGCAAGAGGTTGGAGTTCAAAATCTAGAACCAATG 2040
1981 CATGATGCCCTTGTGCATAATAATAGCAAGAGGTTGGAGTTCAAAATCTAGAACCAATG 2040
2041 AAAACCTTGGCCACTTTAAAGAAAGAAACCGTACCTTCAGGATATTTGGTCATAA 2097
2041 AAAACCTTGGCCACTTTAAAGAAAGAAACCGTACCTTCAGGATATTTGGTCATAA 2097

RESULT 10
US-10-741-600-692
; Sequence 692, Application US/10741600

; Publication No. US20050026169A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; FILE REFERENCE: CL001499
; CURRENT APPLICATION NUMBER: US/10/741,600
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 73997
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 692
; LENGTH: 3256
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-10-741-600-692

Query Match 99.6%; Score 2088.6; DB 22; Length 3256;
Best Local Similarity 99.0%; Pred. No. 0;
Matches 2076; Conservative 21; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGAGAGGTTTCTGTTACTATATGCTACACAGCAGGGAGCAGCAAGGCCATCGCAGAA 60
Db 94 ATGAGAGGTTTCTGTTACTATATGCTACACAGCAGGGAGCAGCAAGGCCATCGCAGAA 153
QY 61 GAAATGTGTGAGCAAGCTGTGTACATGATTTTCTGCAGATCTTCACTGTATTAGTGAA 120
Db 154 GAAATGTGTGAGCAAGCTGTGTACATGATTTTCTGCAGATCTTCACTGTATTAGTGAA 213
QY 121 TCCGATAAGTATGACCTAAAAACCGAAACAGCTCTCTTTGTTGTTGTGGTTTCTACCAG 180
Db 214 TCCGATAAGTATGACCTAAAAACCGAAACAGCTCTCTTTGTTGTTGTGGTTTCTACCAG 273
QY 181 GGCACGGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 274 GGCACGGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 333
QY 241 CTGCGGTTGATTTCTTTGCTCACCTGCGGTATGGTTACTGGGTCTCGGTGATTGAGAA 300
Db 334 CTGCGGTTGATTTCTTTGCTCACCTGCGGTATGGTTACTGGGTCTCGGTGATTGAGAA 393
QY 301 TACACCTACTTTTGCATGGGGGAGATAATGTATTAACGACTTCAAGAGCTTGGAGCC 360
Db 394 TACACCTACTTTTGCATGGGGGAGATAATGTATTAACGACTTCAAGAGCTTGGAGCC 453
QY 361 CGGCATTTCTATGACACTGGACATGCAGATGCTGTAGGTTTGAACCTTGGTTGAG 420
Db 454 CGGCATTTCTATGACACTGGACATGCAGATGCTGTAGGTTTGAACCTTGGTTGAG 513
QY 421 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTGTAGGTCAAGCAGAGACAA 480
Db 514 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTGTAGGTCAAGCAGAGACAA 573
QY 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGTCATCTTGGAGCAGACCTTGTG 540
Db 574 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGTCATCTTGGAGCAGACCTTGTG 633
QY 541 AAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTCTGAGATTCGATGTTTCAGCA 600
Db 634 AAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTCTGAGATTCGATGTTTCAGCA 693
QY 601 AGAAAGGATTTCTGAGGTTTTTGAAGCAAAATGCAAGCAACCAATCCCAATGTTGTA 660
Db 694 AGAAAGGATTTCTGAGGTTTTTGAAGCAAAATGCAAGCAACCAATCCCAATGTTGTA 753
QY 661 ATTGAAGACTTTTGAAGTCTCACTTACCCGTTCCGTTCCGTTCCGTTCCGTTCCGTTCCG 720
Db 754 ATTGAAGACTTTTGAAGTCTCACTTACCCGTTCCGTTCCGTTCCGTTCCGTTCCGTTCCG 813
QY 721 AATATTCCTGGTTTACCCCGCAGAAATTTACAGGTATCATCTGCAGAGTCTCTTGGCCAG 780
Db 814 AATATTCCTGGTTTACCCCGCAGAAATTTACAGGTATCATCTGCAGAGTCTCTTGGCCAG 873
QY 781 GAGGAAAGCCAAAGTATCTGTGATCTTGCAGCAGATCCAGTTTTTTTCAAGTGCCAAATTTCAAAG 840

	874	Db	GAGGAAAGCCCAAGTATCTGTGACTTCACGACAGATCCAGTTTTTTCAAAGTGCCAATTTTCAAAG933
	841	Qy	GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCCTCTGCTGGTAGAATTGGACATT900
	934	Db	GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCCTCTGCTGGTAGAATTGGACATT993
	901	Qy	TCAAAATACAGACTTTTCTCATCAGCTGGAGATGCCTTTCAAGTGAATTAAGAAGAGCACATGC1020
	994	Db	TCAAAATACAGACTTTTCTCATCAGCTGGAGATGCCTTTCAAGTGAATTAAGAAGAGCACATGC1053
	961	Qy	GATTTCTGAGGTACAAAGCCTACTCCAAGACTCGAGCTTGNAGATAAAGAGAGCACATGC1020
	1054	Db	GATTTCTGAGGTACAAAGCCTACTCCAAGACTCGAGSTTGAAGATAAAGAGAGCACATGC1113
	1021	Qy	GTCCTTTTGA AAAATAAAAAGGCAGACA CA AAGAAAGAAAGAGACTACTCTTACCCCAGCATATA1080
	1114	Db	GTCCTTTTGA AAAATAAAGGCAGACA CA AAGAAAGAAAGAGACTACTCTTACCCCAGCATATA1173
	1081	Qy	CCTGCGGATGTTCTCTCCAGTTCAATTTTTTACCTGGTGTCTTTGAAATCCGAGCAATTCCT1140
	1174	Db	CCTGCGGATGTTCTCTCCAGTTCAATTTTTTACCTGGTGTCTTTGAAATCCGAGCAATTCCT1233
	1141	Qy	AAAAAGGCATTTTTTGCAGCCCTTGTGGACTATACAGTGA CAGTGTCTGAAAAGCGCAGG1200
	1234	Db	AAAAAGGCATTTTTTRCAGCCCTTGTGGACTATACAGTGA CAGTGTCTGAAAAGCGCAGG1293
	1201	Qy	CTACAGGAGCTGTGCAGTFAAACAAAGSGCAGCCGATTA TAGCCGCTTTGTACGAGATGCC1260
	1294	Db	CTACAGGAGCTGTGCAGTFAAACAAAGSGCAGCCGATTA TAGCYGCTTTGTACGAGATGCC1353
	1261	Qy	TGTGCTGCTTTGTTGGATCTCCTCCTCGCTTTCCCTTTCTTGCCAGCCACCACCTCAGTCTC1320
	1354	Db	TGTGCTGCTTTGTTGGATCTCCTCCTCGCTTTCCCTTTCTTGCCAGCCACCACCTCAGTCTC1413
	1321	Qy	CTGCTCGAAACATCTTCTCTAAACTTCAACCCAGACCAATATTCTGTGTGCAAGCTCAAGTTTA1380
	1414	Db	CTGCTCGAAACATCTTCTCTAAACTTCAACCCAGACCAATATTCTGTGTGCAAGCTCAAGTTTA1473
	1381	Qy	TTTTCA CCCAGGAAAGCTCCATTTTGTCTTCAAACTGTGGAAATTTCTGTACTGCCACA1440
	1474	Db	TTTTCA CCCAGGAAAGCTCCATTTTGTCTTCAAACTGTGGAAATTTCTGTACTGCCACA1533
	1441	Qy	ACAGAGTTCTTGC GGAAGGGAGTATGACAGGCTGGCTTGGCTTTGTTGGTTGCTTCAGATT1500
	1534	Db	ACAGAGTTCTTGC GGAAGRGAGTGTATCAGGCTGGCTTGGCTTTGTTGGTTGCTTCAGATT1593
	1501	Qy	CTTCAGGCCAAACATACATGATCCCATGAAGACAGCGGGAAGCCCTGGGCTCTTAAGATA1560
	1594	Db	CTTCAGGCCAAACATACATGATCCCATGAAGACAGYGGGAAGCCCTGGGCTCTTAAGATA1653
	1561	Qy	TCCATCTCTCTCGAAACAACAAATTTCTTCCACTTACAGATGACCCTCAATCCCCATC1620
	1654	Db	TCCATCTCTCTCGAAACAACAAATTTCTTCCACTTACAGATGACCCTCAATCCCCATC1713
	1621	Qy	ATAATGTGGGTCCAGGAAACCGGCATAGCCCGCTTTATTGGGTTCTCTACAACATAGAGAG1680
	1714	Db	ATAATGTGGGTCCAGGNAACCGGCATAGCCCGCTTTATTGGGTTCTCTACAACATAGAGAG1773
	1681	Qy	AAACTCCAAGNAAACAACCCAGATGGAAAATTTTGGAGCAATGTGGTTGTTTTTTTGGCTGC1740
	1774	Db	AAACTCCAAGNAAACAACCCAGATGGAAAATTTTGGAGCAATGTGGTTGTTTTTTTGGCTGC1813
	1741	Qy	AGGCATAAGGATAGGATATTCTATTACAGAAAAGAGCTCAGACATTTCTTTAAGCATGGG1800
	1834	Db	AGGCATAAGGATAGGATATTCTATTACAGAAAAGAGCTCAGAYATTTCTTTAAGCATGGG1893
	1801	Qy	ATCTTTAACTCATCTAAAGGTTTCTCTCTCAAGAGATGCTCTGTGTGGGAGGAGGAAGCC1860
	1894	Db	ATCTTTAACTCATCTAAAGGTTTCTCTCTCAAGAGATGCTCTGTGTGGGAGGAGGAAGCC1953
	1861	Qy	CCAGCAAAAGTATGTAACAAGACAACATCCAGCTTCTCATGCCAGCAGGTTGGGAGAGAAATCCTC1920

[illegible]

QY 541 AAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTCTGAGATTTCGATGATTCAGGA 600
DB 652 AAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTCTGAGATTTCGATGATTCAGGA 711
QY 601 AGAAGGATTTCTGAGGTTTGAAGCAAAATGAGTGAACAGCAACCAATCCAAATGTTGTA 660
DB 712 AGAAGGATTTCTGAGGTTTGAAGCAAAATGAGTGAACAGCAACCAATCCAAATGTTGTA 771
QY 661 ATTGAAGATTTGAGTCCTCACTTACCCTTGGTACCCCTCTCTCAAGCTCTCTG 720
DB 772 ATTGAAGATTTGAGTCCTCACTTACCCTTGGTACCCCTCTCTCAAGCTCTCTG 831
QY 721 AATATTTCTGGTTTACCCCAAGATATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 780
DB 832 AATATTTCTGGTTTACCCCAAGATATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 891
QY 781 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG 840
DB 892 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG 951
QY 841 GCAGTTCAACTTACTAGGAATGATGCCATAAACAACCTCTGCTGTGATAGAAATTTGGACATT 900
DB 952 GCAGTTCAACTTACTAGGAATGATGCCATAAACAACCTCTGCTGTGATAGAAATTTGGACATT 1011
QY 901 TCAATATACAGACTTTTCTCTATCAGCCTGGAGATGCCCTTCAGCGTGATCTGCCCTAACAGT 960
DB 1012 TCAATATACAGACTTTTCTCTATCAGCCTGGAGATGCCCTTCAGCGTGATCTGCCCTAACAGT 1071
QY 961 GATTTCTGAGGTCAAAAGCCTTACTCCAAAGACTGACGCTTGAAGATAAAGAGAGCACTGC 1020
DB 1072 GATTTCTGAGGTCAAAAGCCTTACTCCAAAGACTGACGCTTGAAGATAAAGAGAGCACTGC 1131
QY 1021 GTTCCTTTGAAATAAGGAGAGACACAAAGAGAAAGGAGCTTACCTTACCCGAGATATA 1080
DB 1132 GTTCCTTTGAAATAAGGAGAGACACAAAGAGAAAGGAGCTTACCTTACCCGAGATATA 1191
QY 1081 CTGCGGGAGTGTCTCTCAGATTCAATTTTACCTGGTGCTTGAATCCGAGCAATTCCT 1140
DB 1192 CTGCGGGAGTGTCTCTCAGATTCAATTTTACCTGGTGCTTGAATCCGAGCAATTCCT 1251
QY 1141 AAAAAGGCAATTTTGGAGCCCTTGTGGACTATACAGTGACAGTGTCTGAAAAGCGCAG 1200
DB 1252 AAAAAGGCAATTTTGGAGCCCTTGTGGACTATACAGTGACAGTGTCTGAAAAGCGCAG 1311
QY 1201 CTACAGAGCTGTGAGTAAACAAGGGGCGCCGATATAGCCGCTTTGTACAGATGCC 1260
DB 1312 CTACAGAGCTGTGAGTAAACAAGGGGCGCCGATATAGCYGCTTTGTACGAGATGCC 1371
QY 1261 TGTGCTGTCTGTGGATCTCTCTCCCTGCTTCTTCCCTTCTTGGCAGCCACCTCAGTCTC 1320
DB 1372 TGTGCTGTCTGTGGATCTCTCTCCCTGCTTCTTCCCTTCTTGGCAGCCACCTCAGTCTC 1431
QY 1321 CTGCTCGAATCTCTCTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
DB 1432 CTGCTCGAATCTCTCTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1491
QY 1381 TTTACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
DB 1492 TTTACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1551
QY 1441 ACAGAGTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGCTTTGTTGCTTCAGTT 1500
DB 1552 ACAGAGTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGCTTTGTTGCTTCAGTT 1611
QY 1501 CTTTCAGCAACATACATGATCCCATGAAAGACAGCGGGAAGCCCTGGCTCTCTAAGATA 1560
DB 1612 CTTTCAGCAACATACATGATCCCATGAAAGACAGYGGGAAGCCCTGGCTCTCTAAGATA 1671
QY 1561 TCCATCTCTCGAACAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCGATC 1620
DB 1672 TCCATCTCTCGAACAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCGATC 1731

QY 1621 ATAATGGTGGTCCAGGAACCGCATAGCCCGTTTATTTGGTTCCTTACAAATAGAGAG 1680
DB 1732 ATAATGGTGGTCCAGGAACCGCATAGCCCGTTTATTTGGTTCCTTACAAATAGAGAG 1791
QY 1681 AAATCCCAAGAACACACCCAGATGGAATTTTGAGCAATGTGTGTTTTGGCTGC 1740
DB 1792 AAATCCCAAGAACACACCCAGATGGAATTTTGAGCAATGTGTGTTTTGGCTGC 1851
QY 1741 AGGCATAGGATAGGATTTATCTATTCAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
DB 1852 AGGCATAGGATAGGATTTATCTATTCAGAAAGAGCTCAGAYATTTCTTAAAGCATGG 1911
QY 1801 ATCTTAACTCATTAAGGTTTCTCTTCAAGAGATGCTCTCTTGGGAGGAGGAAGCC 1860
DB 1912 ATCTTAACTCATTAAGGTTTCTCTTCAAGAGATGCTCTCTTGGGAGGAGGAAGCC 1971
QY 1861 CCAGCAAAAGTATGTACAAGAACATCCAGCTTTCATGGCCAGCAGGTGGCGAGATCTCTC 1920
DB 1972 CCAGCAAAAGTATGTACAAGAACATCCAGCTTTCATGGCCAGCAGGTGGCGAGATCTCTC 2031
QY 1921 CTCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAAAGATATGGCCCAAGGATGA 1980
DB 2032 CTCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAAAGATATGGCCCAAGGATGA 2091
QY 1981 CATGATGCCCTTGTCAAATAAAGCAAGAGGTTGGAGTTGAAAAAATAAGCAATG 2040
DB 2092 CATGATGCCCTTGTCAAATAAAGCAAGAGGTTGGAGTTGAAAAAATAAGCAATG 2151
QY 2041 AAAACCTTGGCCACTTTTAAAGAAAGAAACCGCTACCTTCAGGATATTTGGTCATAA 2097
DB 2152 AAAACCTTGGCCACTTTTAAAGAAAGAAACCGCTACCTTCAGGATATTTGGTCATAA 2208

RESULT 12

US-09-371-347-45
; Sequence 45, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE;
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 45
; LENGTH: 2094
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-45

Query Match 99.2%; Score 2081; DB 10; Length 2094;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 2094; Conservative 0; Mismatches 0; Indels 3; Gaps 1;

QY 1 ATGAGGAGGTTTCTGTTACTATATGCTACACAGCAGGGACAGCAAAAGCCATCGCAGAA 60
DB 1 ATGAGGAGGTTTCTGTTACTATATGCTACACAGCAGGGACAGCAAAAGCCATCGCAGAA 60
QY 61 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTCTGAGATCTTCACTGTATTAGTAA 120
DB 61 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTCTGAGATCTTCACTGTATTAGTAA 120
QY 121 TCGGATAAGTATGACCTTAAACCCGAAACAGCTCTCTTGTGTTGTTGTTCTTACACG 180
DB 121 TCGGATAAGTATGACCTTAAACCCGAAACAGCTCTCTTGTGTTGTTGTTCTTACACG 180

Qy	181	GGCACCGGAGACCCACCCGACACACGCGCGCAAGTTTGTAAAGAAATACAGAACCAAAACA	240
Db	181	GGCACCGGAGACCCACCCGACACACGCGCGCAAGTTTGTAAAGAAATACAGAACCAAAACA	240
Qy	241	CTGCGGGTTGATTTCTTTTGCTTCACCTCGGGTATCGGTTACTTGGGTCTCGGTGATTCAGAA	300
Db	241	CTGCGGGTTGATTTCTTTTGCTTCACCTCGGGTATCGGTTACTTGGGTCTCGGTGATTCAGAA	300
Qy	301	TACACCTACTTTTGGCAATGGGGGGAAGATAATTGATAAACACATCTTCAAGAGCTTGGAGCC	360
Db	301	TACACCTACTTTTGGCAATGGGGGGAAGATAATTGATAAACACATCTTCAAGAGCTTGGAGCC	360
Qy	361	CGGCATTTCTATGACATCTGGACATGCACTGTGTAGTGGTTTGTAGAACTTGTGGTTGAG	420
Db	361	CGGCATTTCTATGACATCTGGACATGCACTGTGTAGTGGTTTGTAGAACTTGTGGTTGAG	420
Qy	421	CCGTGGATTGCTGGACCTCTGCCAGCCCTCAGAAAGCATTTTAAAGTCAAGCAGAGGACAA	480
Db	421	CCGTGGATTGCTGGACCTCTGCCAGCCCTCAGAAAGCATTTTAAAGTCAAGCAGAGGACAA	480
Qy	481	GAGGAGATAAGTGGCGCACTCCCGTGGCATCACCTGTCATCTTGGAGACAGACCTTTGTG	540
Db	481	GAGGAGATAAGTGGCGCACTCCCGTGGCATCACCTGTCATCTTGGAGACAGACCTTTGTG	540
Qy	541	AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600
Db	541	AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600
Qy	601	AGAAAGGATTCCTGAGGTTTTGAAGCAAAATGCAAGTGAACACACCAATCCAAATGTTGTA	660
Db	601	AGAAAGGATTCCTGAGGTTTTGAAGCAAAATGCAAGTGAACACACCAATCCAAATGTTGTA	660
Qy	661	ATTGAAAGACTTTGAGTCTCTCACTTACCCTGTTCCGTTACCCCACTCTCACAAGCCTCTCTG	720
Db	661	ATTGAAAGACTTTGAGTCTCTCACTTACCCTGTTCCGTTACCCCACTCTCACAAGCCTCTCTG	720
Qy	721	AATATTCCTGTTTTACCCCCAGAAATATTTACAGGTACATCTGACAGGAGTCTCTTGGCCAG	780
Db	721	AATATTCCTGTTTTACCCCCAGAAATATTTACAGGTACATCTGACAGGAGTCTCTTGGCCAG	780
Qy	781	GAGAAAGCCCAAGTATCTGTGACTTCAGCAGATCCAGTCTTCAAGTGCCCAATTTCAAAG	840
Db	781	GAGAAAGCCCAAGTATCTGTGACTTCAGCAGATCCAGTCTTCAAGTGCCCAATTTCAAAG	840
Qy	841	GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTTGGACATT	900
Db	841	GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTTGGACATT	900
Qy	901	TCAAATACAGACTTTTCTATCAGCTGGAGATGCCCTTCAGCGGTGATCTGCCCTAACAGT	960
Db	901	TCAAATACAGACTTTTCTATCAGCTGGAGATGCCCTTCAGCGGTGATCTGCCCTAACAGT	960
Qy	961	GATTTCTGAGGTACAAAGCCTTACTCCAAAGACTGCACTTGNAGATAAAGAGAGCACTGC	1020
Db	961	GATTTCTGAGGTACAAAGCCTTACTCCAAAGACTGCACTTGNAGATAAAGAGAGCACTGC	1020
Qy	1021	GTCTCTTTTGAATAAAGCGAGACACAAAGAAAGAAAGAGCTACTCTTACCCCGACATATA	1080
Db	1021	GTCTCTTTTGAATAAAGCGAGACACAAAGAAAGAAAGAGCTACTCTTACCCCGACATATA	1080
Qy	1081	CCTCGGGATGTTCTCTCCAGTTCATTTTAACTTGGTGTCTTTGAAATCCGAGCAATTCCT	1140
Db	1081	CCTCGGGATGTTCTCTCCAGTTCATTTTAACTTGGTGTCTTTGAAATCCGAGCAATTCCT	1140
Qy	1141	AAAAAGGCATTTTTCGAGGCCCTTGTGGACTATACAGTGNACAGTGTGAAAGCGCAGG	1200
Db	1141	AAAAAGGCATTTTTCGAGGCCCTTGTGGACTATACAGTGNACAGTGTGAAAGCGCAGG	1200
Qy	1201	CTACAGGAGCTGTGCAGTFAAACAAAGGGCGCAGCCGATTATACCGCTTTGTACGAGATGCC	1260
Db	1201	CTACAGGAGCTGTGCAGTFAAACAAAGGGCGCAGCCGATTATACCGCTTTGTACGAGATGCC	1260
Qy	1261	TGTGCCTGCTTGTGTTGGATCTCCTCTCTGCTTTTCCCTTTTGGCCAGCCACCACTCAGTCTC	1320

[illegible]

RESULT 13

RESULTS IS
IIS-11-119-096-45

US-11-119-098-43
: Sequence 45. Application US/11119096

Publication No. US20050191701A1

GENERAL INFORMATION:

APPLICANT: Gravel, Roy A.

; APPLICANT: Rozen, Rima

; APPLICANT: Leclerc, Daniel

APPLICANT: Wilson, Aaron

; APPLICANT: Rosenblatt, David

; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:

; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE

; TITLE OF INVENTION: DEFECTS

FILE REFERENCE: 50004/003005

; CURRENT APPLICATION NUMBER: US/11/119,096

; CURRENT FILING DATE: 2005-04-29

; PRIOR APPLICATION NUMBER: 09/487,841

QY 1921 CTCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGCCCAAGGATGTA 1980
DB 1918 CTCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGCCCAAGGATGTA 1977
QY 1981 CATGATGCCCTTGTGCAATATATAGCAAGAGGTTGGAGTTGCAAAATAGAACCAATG 2040
DB 1978 CATGATGCCCTTGTGCAATATATAGCAAGAGGTTGGAGTTGCAAAATAGAACCAATG 2037
QY 2041 AAAACCTGCCACCTTTAAAGAAAGAAAAACGCTACCTTCAGGATATTTGGTCATAA 2097
DB 2038 AAAACCTGCCACCTTTAAAGAAAGAAAAACGCTACCTTCAGGATATTTGGTCATAA 2094

RESULT 14

US-09-371-347-47
; Sequence 47, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 47
; LENGTH: 2093
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-47

Query Match 99.1%; Score 2079; DB 10; Length 2093;

Best Local Similarity 99.8%; Pred. No. 0;

Matches 2093; Conservative 0; Mismatches 0; Indels 4; Gaps 1;

QY 1 ATGAGAGGTTCTGTACTATATGCTACACAGCGGAGCAGGCAAGGCCATCGCAGAA 60
DB 1 ATGAGAGGTTCTGTACTATATGCTACACAGCGGAGCAGGCAAGGCCATCGCAGAA 60
QY 61 GAAATGTGTGACCAAGCTGTGGTACATGATTTCTGACAGATCTTCACTGTATTAGTGAA 120
DB 61 GAAATGTGTGACCAAGCTGTGGTACATGATTTCTGACAGATCTTCACTGTATTAGTGAA 120
QY 121 TCCGATAAGTATGACCTAAAAACCGAAACAGCTCTCTTGTGTGTGTGTCTTACACAG 180
DB 121 TCCGATAAGTATGACCTAAAAACCGAAACAGCTCTCTTGTGTGTGTGTCTTACACAG 180
QY 181 GGCACCGAGACCCACCGACACAGCCCGCAAGTTGTTAAGAAATACAGAAACCAACA 240
DB 181 GGCACCGAGACCCACCGACACAGCCCGCAAGTTGTTAAGAAATACAGAAACCAACA 240
QY 241 CTGCGGTTGATTTCTTCTGCTCACCCTGCGGTATGGGTACTGGGTCTCGGTGATTAGAA 300
DB 241 CTGCGGTTGATTTCTTCTGCTCACCCTGCGGTATGGGTACTGGGTCTCGGTGATTAGAA 300
QY 301 TACACCTACTTTTGGCAATGGGGGAAGATAATATGATAAACGACTTCAAGAGCTTGGAGCC 360
DB 301 TACACCTACTTTTGGCAATGGGGGAAGATAATATGATAAACGACTTCAAGAGCTTGGAGCC 360
QY 361 CGGCATTCTATGACACTGGACATGCAATGACTGTGTAGGTTAGAACTTGTGGTTGAG 420
DB 361 CGGCATTCTATGACACTGGACATGCAATGACTGTGTAGGTTAGAACTTGTGGTTGAG 420
QY 421 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTTCAAGCAGAGACAA 480
DB 421 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTTCAAGCAGAGACAA 480

QY 481 GAGGAGATAAGTGGCGCACTCCCGTGGCATCACTGCAATCCTTGAGGACAGACCTTGTG 540
DB 481 GAGGAGATAAGTGGCGCACTCCCGTGGCATCACTGCAATCCTTGAGGACAGACCTTGTG 540
QY 541 AGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCCATGATTCAGA 600
DB 541 AGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCCATGATTCAGA 600
QY 601 AGAAAGGATTCTGAGGTTTGAAGCAAAATGCAAGCAACCAATCCAATGTTGTA 660
DB 601 AGAAAGGATTCTGAGGTTTGAAGCAAAATGCAAGCAACCAATCCAATGTTGTA 660
QY 661 ATTGAAGACTTTTGAAGTCTCACTTACCCGTTCCGTAACCCCACTCTCAAGCCTCTCTG 720
DB 661 ATTGAAGACTTTTGAAGTCTCACTTACCCGTTCCGTAACCCCACTCTCTCAAGCCTCTCTG 720
QY 721 ATATTTCTGTTTACCCCGAATATTTACAGGTACATCTCGAGGAGTCTCTTGGCCAG 780
DB 721 ATATTTCTGTTTACCCCGAATATTTACAGGTACATCTCTGAGGAGTCTCTTGGCCAG 780
QY 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTCAGTGCCAAATTTCAAAG 840
DB 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTCAGTGCCAAATTTCAAAG 840
QY 841 GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTGCTGTGATGATTTGACATT 900
DB 841 GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTGCTGTGATGATTTGACATT 900
QY 901 TCAATATACAGCTTTTCTTATCAGCTGAGATGCTTTCAGCGTGTATCTGCCCTAACAGT 960
DB 901 TCAATATACAGCTTTTCTTATCAGCTGAGATGCTTTCAGCGTGTATCTGCCCTAACAGT 960
QY 961 GATTTCTGAGGTACAAAGCCTACTCCAAAGACTGCAAGCTTGAAGATAAAAGAGAGCACTGC 1020
DB 961 GATTTCTGAGGTACAAAGCCTACTCCAAAGACTGCAAGCTTGAAGATAAAAGAGAGCACTGC 1020
QY 1021 GTCTTTTGAATAAAGGACACAAAGAAAGAGAGCTACCTTACCCAGCATATA 1080
DB 1021 GTCTTTTGAATAAAGGACACAAAGAAAGAGAGCTACCTTACCCAGCATATA 1080
QY 1081 CTTGCGGAGTGTCTCTCAGTTTCAATTTTACCTGCTGTCTGTAATCCGACCAATTCCT 1140
DB 1081 CTTGCGGAGTGTCTCTCAGTTTCAATTTTACCTGCTGTCTGTAATCCGACCAATTCCT 1140
QY 1141 AAAAAGGCAATTTTGGAGCCCTTGTGACTATACAGTGACAGTGTCTGAAAGCCGAGG 1200
DB 1141 AAAAAGGCAATTTTGGAGCCCTTGTGACTATACAGTGACAGTGTCTGAAAGCCGAGG 1200
QY 1201 CTACAGGAGCTGTGAGTAAACAAGGGGAGCCGATTTAGCCGCTTTGTACGAGATGCC 1260
DB 1201 CTACAGGAGCTGTGAGTAAACAAGGGGAGCCGATTTAGCCGCTTTGTACGAGATGCC 1260
QY 1261 TGTGCTGCTGTGAGATCTCTCTGCTTTCCTTCTGCGAGCCACCACTCAGTCTC 1320
DB 1261 TGTGCTGCTGTGAGATCTCTCTGCTTTCCTTCTGCGAGCCACCACTCAGTCTC 1320
QY 1321 CTGCTCGAACAATCTTCTTAACTTCAACCCAGACCAATATTTGCTGTCAGAGCTCAAGTTTA 1380
DB 1321 CTGCTCGAACAATCTTCTTAACTTCAACCCAGACCAATATTTGCTGTCAGAGCTCAAGTTTA 1380
QY 1381 TTTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTACTGCCACA 1440
DB 1381 TTTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTACTGCCACA 1440
QY 1441 ACAGAGGTTCTCGGAAGGAGTATGTACAGCTGCTGCTTGTGTTGCTTGTGTTGTTGTT 1500
DB 1441 ACAGAGGTTCTCGGAAGGAGTATGTACAGCTGCTGCTTGTGTTGCTTGTGTTGTTGTT 1500
QY 1501 CTTTACGCAAAACATACATGCTATCCCATGAAGACAGCGGAAAGCCCTGCTCTAAGATA 1560
DB 1501 CTTTACGCAAAACATACATGCTATCCCATGAAGACAGCGGAAAGCCCTGCTCTAAGATA 1560

QY 1561 TCATCTCTCTCGAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC 1620
DB 1561 TCATCTCTCTCGAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC 1620
QY 1621 ATAATGGTGGGTCCAGAACCCGCGATAGCCCGTTTATTTGGGTTCCTACAACATAGAGAG 1680
DB 1621 ATAATGGTGGGTCCAGAACCCGCGATAGCCCGTTTATTTGGGTTCCTACAACAT---AG 1676
QY 1681 AAATCCCAAGAACCAACCCAGATGGAATTTTGGAGCAATGTGGTGTGTTTTGGCTGC 1740
DB 1677 AAATCCCAAGAACCAACCCAGATGGAATTTTGGAGCAATGTGGTGTGTTTTGGCTGC 1736
QY 1741 AGGCATAAGGATAGGATTTATCTTATTCAGAAAGAGCTCAGACATTTCCCTTAAGCATGG 1800
DB 1737 AGGCATAAGGATAGGATTTATCTTATTCAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1796
QY 1801 ATCTTAACTCATCTTAAAGGTTTCCCTTCTCAAGAGATGCTCCTGTTGGGAGGAGGAAGCC 1860
DB 1797 ATCTTAACTCATCTTAAAGGTTTCCCTTCTCAAGAGATGCTCCTGTTGGGAGGAGGAAGCC 1856
QY 1861 CCAGCAAAATGTATGACAAACATCCAGCTTCATGCGCAGCAGGTGGCGAGATCCTC 1920
DB 1857 CCAGCAAAATGTATGACAAACATCCAGCTTCATGCGCAGCAGGTGGCGAGATCCTC 1916
QY 1921 CTCGAGGAGAGCGGCATATTTATGTGTGGAGATGCAAGATATGGCCAGGATGA 1980
DB 1917 CTCGAGGAGAGCGGCATATTTATGTGTGGAGATGCAAGATATGGCCAGGATGA 1976
QY 1981 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAAAATAAGCAATG 2040
DB 1977 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAAAATAAGCAATG 2036
QY 2041 AAAACCTGGCCACTTTAAAAGAGAAAAACGCTACCTTCAGGATATTTGGTCATAA 2097
DB 2037 AAAACCTGGCCACTTTAAAAGAGAAAAACGCTACCTTCAGGATATTTGGTCATAA 2093

RESULT 15
US-11-119-096-47
; Sequence 47, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119, 096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 47
; LENGTH: 2093
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-47

Query Match 99.1%; Score 2079; DB 26; Length 2093;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 0; Indels 4; Gaps 1;

QY 1 ATGAGGAGGTTTCTGTACTATATCTACAGAGGACAGGCAAAAGGCCATCGCAGAA 60
DB 1 ATGAGGAGGTTTCTGTACTATATCTACAGAGGACAGGCAAAAGGCCATCGCAGAA 60
QY 61 GAAATGTGTGAGCAAGCTGTGTACATGGATTTCTGCAGATCTTTCACCTGTATTAAGTAA 120
DB 61 GAAATGTGTGAGCAAGCTGTGTACATGGATTTCTGCAGATCTTTCACCTGTATTAAGTAA 120
QY 121 TCCGATATAGTATGACTTAAAAACCGAAGACAGCTCTCTTGTGTGTGGTTCCTACCAG 180
DB 121 TCCGATATAGTATGACTTAAAAACCGAAGACAGCTCTCTTGTGTGTGGTTCCTACCAG 180
QY 181 GSCACCGGAGACCCACCCGACACACGCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
DB 181 GSCACCGGAGACCCACCCGACACACGCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
QY 241 CTGCGGTTGATTTCTTGTCTCACCTGCGGTATGGGTACTCGGTGATTCAGAA 300
DB 241 CTGCGGTTGATTTCTTGTCTCACCTGCGGTATGGGTACTCGGTGATTCAGAA 300
QY 301 TACACCTACTTTTGCATATGGGGGAAGATAATGTATTAACGACTTCAAGAGCTTGAGCC 360
DB 301 TACACCTACTTTTGCATATGGGGGAAGATAATGTATTAACGACTTCAAGAGCTTGAGCC 360
QY 361 CGGCATTTCTATGACACATCGGACATCGATGACTGTGTAGTTTAGAACTTGTGGTTGAG 420
DB 361 CGGCATTTCTATGACACATCGGACATCGATGACTGTGTAGTTTAGAACTTGTGGTTGAG 420
QY 421 CGGTGGATTTGTGGACTCTTGGCCAGCCCTCAGAAAGCAATTTAGGTCAAGCAGAGACAA 480
DB 421 CGGTGGATTTGTGGACTCTTGGCCAGCCCTCAGAAAGCAATTTAGGTCAAGCAGAGACAA 480
QY 481 GAGGAGATTAAGTGGCGACTCCGGTGGCATCACTGTCATCTTGGAGCAGACCTTGTG 540
DB 481 GAGGAGATTAAGTGGCGACTCCGGTGGCATCACTGTCATCTTGGAGCAGACCTTGTG 540
QY 541 AAGTCAGAGCTCTACACATTCGAATCTCAAGTCGAGCTTCTCAGATTCGATGATTCAGGA 600
DB 541 AAGTCAGAGCTCTACACATTCGAATCTCAAGTCGAGCTTCTCAGATTCGATGATTCAGGA 600
QY 601 AGAAAGGATTTGAGGTTTGAAGCAAAATGCAGTGAAACAGCAACCAATCCAATGTTGA 660
DB 601 AGAAAGGATTTGAGGTTTGAAGCAAAATGCAGTGAAACAGCAACCAATCCAATGTTGA 660
QY 661 ATTGAAGCTTTGAGTCTCCTACTTACCGTTCGGTACCCCACTCTCAAGGCTCTCTG 720
DB 661 ATTGAAGCTTTGAGTCTCCTACTTACCGTTCGGTACCCCACTCTCAAGGCTCTCTCTG 720
QY 721 AATATTTCTGGTTTACCCCAAGATTTTACAGGTACATCTCGAGGAGTCTCTTGGCCAG 780
DB 721 AATATTTCTGGTTTACCCCAAGATTTTACAGGTACATCTCGAGGAGTCTCTTGGCCAG 780
QY 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTCAAGTGCCTTCAAG 840
DB 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTCAAGTGCCTTCAAG 840
QY 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGTAGATTTGGACAT 900
DB 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGTAGATTTGGACAT 900
QY 901 TCAATACAGACTTTTCTTATCAGCTGGAGATGCTTTCAGGCTGATCTGCTTAAACAGT 960
DB 901 TCAATACAGACTTTTCTTATCAGCTGGAGATGCTTTCAGGCTGATCTGCTTAAACAGT 960
QY 961 GATTTCTGAGGTAACAAAGCCTTCTCAAGAGCTGCACTTGAAGATAAAAGAGAGCAGTGC 1020
DB 961 GATTTCTGAGGTAACAAAGCCTTCTCAAGAGCTGCACTTGAAGATAAAAGAGAGCAGTGC 1020
QY 1021 GTCTTTTGAATAAAGGACACCAAGAGAGAGGAGCTTACCTTACCCAGCATATA 1080
DB 1021 GTCTTTTGAATAAAGGACACCAAGAGAGAGGAGCTTACCTTACCCAGCATATA 1080
QY 1081 CCTGCGGATGTTCTCTCCAGTTTCACTTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140

[illegible]

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OM nucleic - nucleic search, using sw model

Run on: November 8, 2005, 15:42:02 ; Search time 235.757 Seconds
(without alignments)
14554.251 Million cell updates/sec

Title: US-09-371-347A-41

Perfect score: 2097
Sequence: 1 atgaggaggtttctgttact.....ttcaggatatgtgtcataa 2097

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents NA.*

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- 2: /cgn2_6/prodata/1/ina/5B COMB.seq.*
- 3: /cgn2_6/prodata/1/ina/6A COMB.seq.*
- 4: /cgn2_6/prodata/1/ina/6B COMB.seq.*
- 5: /cgn2_6/prodata/1/ina/PCUS COMB.seq.*
- 6: /cgn2_6/prodata/1/ina/backfiles1.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2095.4	99.9	3259	3	US-09-318-448-23
2	2093.8	99.8	3242	4	US-09-349-016-4215
3	386.4	18.4	390	3	US-08-905-223-71
4	380.6	18.1	601	4	US-09-949-016-150019
5	379.4	18.1	35916	4	US-09-949-016-15957
6	379	18.1	601	4	US-09-949-016-150020
7	190.4	9.1	601	4	US-09-949-016-150037
8	188.8	9.0	601	4	US-09-949-016-150047
9	187.2	8.9	601	4	US-09-949-016-150048
10	186.4	8.9	601	4	US-09-949-016-150046
11	174.4	8.3	2475	4	US-09-566-921-88
12	155.2	7.4	601	4	US-09-949-016-150030
13	154.8	7.4	601	4	US-09-949-016-150031
14	129.2	6.2	244	4	US-09-471-276-495
15	128.6	6.1	601	4	US-09-949-016-150007
16	126.2	6.0	601	4	US-09-949-016-150029
17	123.4	5.9	601	4	US-09-949-016-150008
18	123.4	5.9	601	4	US-09-949-016-150055
19	121.4	5.8	601	4	US-09-949-016-150041
20	121.4	5.8	601	4	US-09-949-016-150042
21	99.4	4.7	601	4	US-09-949-016-150032
22	76	3.6	601	4	US-09-949-016-150018
23	63.6	3.0	4353	2	US-08-365-486A-18
24	63.6	3.0	4353	3	US-08-880-342-18
25	63.6	3.0	4780	2	US-08-365-486A-20
26	63.6	3.0	4780	3	US-09-123-708-3
27	63.6	3.0	4780	3	US-09-123-624-3

28	63.6	3.0	4780	3	US-08-880-342-20	Sequence 20, Appl
29	57.8	2.8	1292	4	US-09-270-767-10272	Sequence 10272, A
30	57.6	2.7	4079	4	US-09-016-434-1477	Sequence 1477, Ap
31	57.2	2.7	5057	2	US-08-365-486A-12	Sequence 12, Appl
32	57.2	2.7	5057	3	US-08-880-342-12	Sequence 12, Appl
33	57.2	2.7	5108	1	US-07-642-002-1	Sequence 1, Appl
34	57.2	2.7	13508	4	US-08-956-171E-120	Sequence 120, App
35	57.2	2.7	13508	4	US-08-781-986A-120	Sequence 120, App
36	54.8	2.6	2403	4	US-09-023-655-1226	Sequence 1226, Ap
37	53.6	2.6	1863	3	US-09-627-216A-13	Sequence 13, Appl
38	53.6	2.6	1863	4	US-09-765-873A-13	Sequence 13, Appl
39	52.8	2.5	1890	3	US-09-134-001C-1557	Sequence 1557, Ap
c 40	52.6	2.5	3155	4	US-09-710-279-3424	Sequence 3424, Ap
c 41	52.6	2.5	4055	4	US-09-710-279-3357	Sequence 3357, Ap
42	51.2	2.4	1887	4	US-09-710-279-2843	Sequence 2843, Ap
43	50.8	2.4	1929	4	US-09-543-681A-2997	Sequence 2997, Ap
44	50.2	2.4	1448	3	US-08-936-165A-113	Sequence 113, App
45	49.2	2.3	3037	4	US-09-911-781-10	Sequence 10, Appl

ALIGNMENTS

RESULT 1

US-09-318-448-23
; Sequence 23, Application US/09318448
; Patent No. 6210950
; GENERAL INFORMATION:
; APPLICANT: Johnson, William G.
; APPLICANT: Stenroos, Edward S.
; TITLE OF INVENTION: METHODS FOR DIAGNOSING, PREVENTING, AND TREATING
; FILE REFERENCE: 601-1-057
; CURRENT APPLICATION NUMBER: US/09/318,448
; CURRENT FILING DATE: 1999-05-25
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 23
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-318-448-23

Query Match		99.9%;	Score 2095.4;	DB 3;	Length 3259;
Best Local Similarity		100.0%;	Pred. No. 0;		
Matches 2096;		Conservative	0;	Mismatches	1; Indels 0; Gaps 0;
QY	1	ATGAGGAGGTTTCTGTTTACTATATGCTACAGCAGGAGGACAGGCAAGGCCATCGCAGAA	60		
DB	80	ATGAGGAGGTTTCTGTTTACTATATGCTACAGCAGGAGGACAGGCAAGGCCATCGCAGAA	139		
QY	61	GAATATGTGACCAAGCTGTGTACATGATTTCTGCAGATCTTTCACGTGTTTAGTGAA	120		
DB	140	GAATATGTGACCAAGCTGTGTACATGATTTCTGCAGATCTTTCACGTGTTTAGTGAA	199		
QY	121	TCGCATAAGTATGACCTCAAAACCGAAACAGCTCTCTTTGTTGTTGTTTCTACCACG	180		
DB	200	TCGCATAAGTATGACCTCAAAACCGAAACAGCTCTCTTTGTTGTTGTTTCTACCACG	259		
QY	181	GGCAGCGAGAGCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA	240		
DB	260	GGCAGCGAGAGCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA	319		
QY	241	CTGCCGTTGATTCTTTCTCCTCAGCTGCGGTATGGTTACTGGTCTCGTGATTCAGAA	300		
DB	320	CTGCCGTTGATTCTTTCTCCTCAGCTGCGGTATGGTTACTGGTCTCGTGATTCAGAA	379		
QY	301	TACACCTACTTTTGAATGGGGGAGATAAATGTATAACGACTTCAAGAGCTTGAGCC	360		
DB	380	TACACCTACTTTTGAATGGGGGAGATAAATGTATAACGACTTCAAGAGCTTGAGCC	439		
QY	361	CGGCATTCTATGACACTGACATGACATGATGTTAGTTTGAACCTTGTGTTGAG	420		

Db 440 CGGCATTTCTATGACACTGGACATGCGATGACTGTGTAGGTTTAGAACTTGTGGTTGAG 499
Qy 421 CCGTGAATTCCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGCTCAAGCAGAGACAA 480
Db 500 CCGTGAATTCCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAGAGCAGAGACAA 559
Qy 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGCATCCTTTGAGGACAGACCTTTGTG 540
Db 560 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGCATCCTTTGAGGACAGACCTTTGTG 619
Qy 541 AAGTCAGAGTGCTACACATTTGAATCTCAAGTCGAGCTCTCTGAGATTCGATGATTCAGGA 600
Db 620 AAGTCAGAGTGCTACACATTTGAATCTCAAGTCGAGCTCTCTGAGATTCGATGATTCAGGA 679
Qy 601 AGAAAGGATCTGAGGTTTTGAAGCAAAATGCAGTGAAAGCAAGCAACCAATCCATGTTGTA 660
Db 680 AGAAAGGATCTGAGGTTTTGAAGCAAAATGCAGTGAAAGCAAGCAACCAATCCATGTTGTA 739
Qy 661 ATTGAAGACTTTGAGTCCCTCACTTACCCGTTGGTACCCCACTCTCACAAGCCTCTCTG 720
Db 740 ATTGAAGACTTTGAGTCCCTCACTTACCCGTTGGTACCCCACTCTCACAAGCCTCTCTG 799
Qy 721 AATATTCTCTGGTTTATCCCCAGCAATATTTACAGSTACATCTGCAGGAGTCTCTTGGCCAG 780
Db 800 AATATTCTCTGGTTTATCCCCAGCAATATTTACAGSTACATCTGCAGGAGTCTCTTGGCCAG 859
Qy 781 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGGCAATTTCAAAG 840
Db 860 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGGCAATTTCAAAG 919
Qy 841 GCAGTTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGTGTAGAAATTTGGACATT 900
Db 920 GCAGTTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGTGTAGAAATTTGGACATT 979
Qy 901 TCAATACAGACTTTTCTATCAGCCTGGAGATGCTTTCAGCGTGATCTGCCCTAACAGT 960
Db 980 TCAATACAGACTTTTCTATCAGCCTGGAGATGCTTTCAGCGTGATCTGCCCTAACAGT 1039
Qy 961 GATTCAGGATCAAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGCACTGC 1020
Db 1040 GATTCAGGATCAAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGCACTGC 1099
Qy 1021 GTCCCTTTTGAATAAAGGAGACACAAAGAGAGAGGAGCTACCTTACCCAGCATATA 1080
Db 1100 GTCCCTTTTGAATAAAGGAGACACAAAGAGAGAGGAGCTACCTTACCCAGCATATA 1159
Qy 1081 CTGCGGGATGTTCTCTCCAGTTTCATTTTTACCTGGTGCTTTGAAATCCGAGCAATTCCT 1140
Db 1160 CTGCGGGATGTTCTCTCCAGTTTCATTTTTACCTGGTGCTTTGAAATCCGAGCAATTCCT 1219
Qy 1141 AAAAAGGCATTTTGGAGCCCTTGTGGACTATACAGTGACAGTGACGTGTAAGAGCCAGG 1200
Db 1220 AAAAAGGCATTTTGGAGCCCTTGTGGACTATACAGTGACAGTGACGTGTAAGAGCCAGG 1279
Qy 1201 CTACAGAGCTGTCAGTAAACAAGGGGAGCGGATTTATAGCCGCTTTGTACGAGATGCC 1260
Db 1280 CTACAGAGCTGTCAGTAAACAAGGGGAGCGGATTTATAGCCGCTTTGTACGAGATGCC 1339
Qy 1261 TGTGCTGCTTGTGGATCTCTCCCTCGCTTTCCCTTTCTTGGCAGCCACCACTCAGTCTC 1320
Db 1340 TGTGCTGCTTGTGGATCTCTCCCTCGCTTTCCCTTTCTTGGCAGCCACCACTCAGTCTC 1399
Qy 1321 CTGCTCGAACATCTCTCTAAACTTCAACCAGACCATATTTCTGTGTGAGAGCTCAAGTTTA 1380
Db 1400 CTGCTCGAACATCTCTCTAAACTTCAACCAGACCATATTTCTGTGTGAGAGCTCAAGTTTA 1459
Qy 1381 TTTTCAAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCGACA 1440
Db 1460 TTTTCAAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCGACA 1519
Qy 1441 ACAGAGGTTCTCGGGAAGGGAGTATGTACAGGCTGGCTTGTGGTTGCTTCAGTT 1500
Db 1520 ACAGAGGTTCTCGGGAAGGGAGTATGTACAGGCTGGCTTGTGGTTGCTTCAGTT 1579

Qy 1501 CTTTCCAGCCAAACATACATGTCATCCCATGAAGACAGCGGAAAGCCCTGCTCCTAAGATA 1560
Db 1580 CTTTCCAGCCAAACATACATGTCATCCCATGAAGACAGCGGAAAGCCCTGCTCCTAAGATA 1639
Qy 1561 TCCATCTCTCTCGAACCAACAAATTTTCCATTTACCAGATGACCCCTCAATCCCCATC 1620
Db 1640 TCCATCTCTCTCGAACCAACAAATTTTCCATTTACCAGATGACCCCTCAATCCCCATC 1699
Qy 1621 ATAATGTTGGTTCAGGAACCGGCATAGCCCGCTTTATTTGGTTCTCTACAACATAGAG 1680
Db 1700 ATAATGTTGGTTCAGGAACCGGCATAGCCCGCTTTATTTGGTTCTCTACAACATAGAG 1759
Qy 1681 AAATCCCAAGACACACCCAGATGGAATTTTGGAGCAATGTGTGTTGTTTGGCTGC 1740
Db 1760 AAATCCCAAGACACACCCAGATGGAATTTTGGAGCAATGTGTGTTTGGCTGC 1819
Qy 1741 AGGCATAAGGATAGGATTTATCTATTCAAGAAAAGAGCTCAGACATTTCTTTAAGCATGG 1800
Db 1820 AGGCATAAGGATAGGATTTATCTATTCAAGAAAAGAGCTCAGACATTTCTTTAAGCATGG 1879
Qy 1801 ATCTTAACTCATCTAAAGTTTCTCTCAAGAGATGCTCTGTGGGAGGAGGAAGCC 1860
Db 1880 ATCTTAACTCATCTAAAGTTTCTCTCTCAAGAGATGCTCTGTGGGAGGAGGAAGCC 1939
Qy 1861 CCAGCAAAAGTATGTAACAGCAACATCCAGCTTCTATGCCAGCAGGTGGCGAGAATCCCT 1920
Db 1940 CCAGCAAAAGTATGTAACAGCAACATCCAGCTTCTATGCCAGCAGGTGGCGAGAATCCCT 1999
Qy 1921 CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAAAGATGTA 1980
Db 2000 CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAAAGATGTA 2059
Qy 1981 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACTAGAACCAATG 2040
Db 2060 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACTAGAACCAATG 2119
Qy 2041 AAAACCCCTGGCCACTTTTAAAGAAAGAAACCGCTACCTTCAGGATATTTGGTCATAA 2097
Db 2120 AAAACCCCTGGCCACTTTTAAAGAAAGAAACCGCTACCTTCAGGATATTTGGTCATAA 2176

RESULT 2

US-09-949-016-4215
; Sequence 4215, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; PRIOR FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4215
; LENGTH: 3242
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-4215

Query Match 99.8%; Score 2093.8; DB 4; Length 3242;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 2095; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1 ATGAGAGGTTTCTGTACTATATGCTACACAGCAGGACAGGCAAGGCCATCGCAGAA 60
|||||

Wed Nov

Db	80	ATGAGGAGGTTTCTGTGTACTATATGCTTACACAGCAGGACAGGCGAAAGGCCATCGCAGAA	139
Qy	61	GAAATATGTGACGAAGCTGTGGTACATCGAATTTTCTGCAGATCTTCACTGTATTAGTGAA	120
Db	140	GAAATATGTGAGCAAGCTGTGGTACATCGAATTTTCTGCAGATCTTCACTGTATTAGTGAA	199
Qy	121	TCCGATAAGTATGACCTTAAAAACCGAAACAGCTCTCTTGTGTGTGTGGTTTCTACCAAG	180
Db	200	TCCGATAAGTATGACCTTAAAAACCGAAACAGCTCTCTCTTGTGTGTGTGGTTTCTACCAAG	259
Qy	181	GGCACCGGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGGAAATACAGAACCAACA	240
Db	260	GGCACCGGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGGAAATACAGAACCAACA	319
Qy	241	CTGCCGGTTGATTTCTTTTGTCTCACTGCGGTATGGGTTACTTGGGTCTCGGTGATTCAGAA	300
Db	320	CTGCCGGTTGATTTCTTTTGTCTCACTGCGGTATGGGTTACTTGGGTCTCGGTGATTCAGAA	379
Qy	301	TACACCTACTTTTGGCAATGGGGGGAAGATAATTGATATAACGACTTCAAGAGCTTGGAGCC	360
Db	380	TACACCTACTTTTGGCAATGGGGGGAAGATAATTGATATAACGACTTCAAGAGCTTGGAGCC	439
Qy	361	CGGCATTTCTATGACACTGGACATGCAGATGACCTGTGTAGTTTGTAGAACCTTGTGGTTGAG	420
Db	440	CGGCATTTCTATGACACTGGACATGCAGATGACCTGTGTAGTTTGTAGAACCTTGTGGTTGAG	499
Qy	421	CCGTGGATTTGTGGAGCTCTGCCAGCCCTCAGAAAGCATTTTAGTCAAGCAGAGGACAA	480
Db	500	CCGTGGATTTGTGGAGCTCTGCCAGCCCTCAGAAAGCATTTTAGTCAAGCAGAGGACAA	559
Qy	481	GAGAGATTAAGTGGCGCACTCCCGGTGGCATCACCTGATCCTTGGAGACAGACCTTGTGT	540
Db	560	GAGAGATTAAGTGGCGCACTCCCGGTGGCATCACCTGATCCTTGGAGACAGACCTTGTGT	619
Qy	541	AAGTCAGAGCTGTACACATTTGAATCTCAGTCCAGCTTCTGAGATTCGATGATTCAGGA	600
Db	620	AAGTCAGAGCTGTACACATTTGAATCTCAGTCCAGCTTCTGAGATTCGATGATTCAGGA	679
Qy	601	AGAAAGGATTTCTGAGGTTTTGAAGCAAAATGCAGTGAACAGCAACCAATCCAATGTTGTA	660
Db	680	AGAAAGGATTTCTGAGGTTTTGAAGCAAAATGCAGTGAACAGCAACCAATCCAATGTTGTA	739
Qy	661	ATTGAAGACTTTTGAGTCTCTCACTTACCGGTTTCGGTACCCGACCTCTCACAAGCCTCTCTG	720
Db	740	ATTGAAGACTTTTGAGTCTCTCACTTACCGGTTTCGGTACCCGACCTCTCACAAGCCTCTCTG	799
Qy	721	AATATTCTGGTTTTACCCCGAGATATTACAGGTACATCTGCAGGAGTCTCTTGGCCAG	780
Db	800	AATATTCTGGTTTTACCCCGAGATATTACAGGTACATCTGCAGGAGTCTCTTGGCCAG	859
Qy	781	GAGAAAGCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG	840
Db	860	GAGAAAGCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG	919
Qy	841	GCAGTTCAACTTATCTAGGAATGATGCCATAAAAAACCACTCTGCTGGTAGAATTTGGACATT	900
Db	920	GCAGTTCAACTTATCTAGGAATGATGCCATAAAAAACCACTCTGCTGGTAGAATTTGGACATT	979
Qy	901	TCAAAATACAGACTTTTCTCTATCAGCTGGAGATGCCCTCAGCGTGATCTGCCCTTAAAGT	960
Db	980	TCAAAATACAGACTTTTCTCTATCAGCTGGAGATGCCCTCAGCGTGATCTGCCCTTAAAGT	1039
Qy	961	GATTCTGAGGTACAAAGCCTACTCCAAGACTGCAGCTTGAAGATAAAAGAGAGCACTGC	1020
Db	1040	GATTCTGAGGTACAAAGCCTACTCCAAGACTGCAGCTTGAAGATAAAAGAGAGCACTGC	1099
Qy	1021	GTCCTTTTGAATAAAGGCGACACAAAGAAAGAAAGAGCTACTCTTACCCCGACATATA	1080
Db	1100	GTCCTTTTGAATAAAGGCGACACAAAGAAAGAAAGAGCTACTCTTACCCCGACATATA	1159
Qy	1081	CCTCGGGAGTGTCTCTCCAGTTCATTTTTACCTGGTGTCTTGAATTCGAGCAATTCCT	1140
Db	1160	CCTCGGGAGTGTCTCTCCAGTTCATTTTTACCTGGTGTCTTGAATTCGAGCAATTCCT	1219

QY	1141	AAAAAGGCATTTTTCGAGAGCCCTTGTGGACTATACAGTGCACAGTGCCTGTAAGAGCCGAGG	1200
DB	1220	AAAAAGGCATTTTTCGAGAGCCCTTGTGGACTATACAGTGCACAGTGCCTGTAAGAGCCGAGG	1279
QY	1201	CTACAGGAGCTGTGCAGTAAACAAGGGGCGAGCGATTATAGCGCGCTTTGTACGAGATGCC	1260
DB	1280	CTACGAGAGCTGTGCAGTAAACAAGGGGCGAGCGATTATAGCGCGCTTTGTACGAGATGCC	1339
QY	1261	TGTGCGCTGCTTGTGGATCTCCTCTCGCTTTCCCTTCTTCTTTCGCGCCACCACTCAGTCTC	1320
DB	1340	TGTGCGCTGCTTGTGGATCTCCTCTCGCTTTCCCTTCTTTCGCGCCACCACTCAGTCTC	1399
QY	1321	CTGCTCGAACAATCTTCTCTAAACTTCAACCCAGACCAATATTCGTGTGCGAGCTCAAGTTTA	1380
DB	1400	CTGCTCGAACAATCTTCTCTAAACTTCAACCCAGACCAATATTCGTGTGCGAGCTCAAGTTTA	1459
QY	1381	TTTTCACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAAATTCCTGCTCTACTGCCACA	1440
DB	1460	TTTTCACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAAATTCCTGCTCTACTGCCACA	1519
QY	1441	ACAGAGGTTCTGCGGAAAGGGAGTATGPAAGGCTGGCTGGCCCTTGTGTGGTTGCTTCAGTT	1500
DB	1520	ACAGAGGTTCTGCGGAAAGGGAGTATGPAAGGCTGGCTGGCCCTTGTGTGGTTGCTTCAGTT	1579
QY	1501	CTTCAGGCCAAACATACATATGATGCCATGAAGACAGCGGGAAAGCCCTGGCTCCTAAGATA	1560
DB	1580	CTTCAGGCCAAACATACATATGATGCCATGAAGACAGCGGGAAAGCCCTGGCTCCTAAGATA	1639
QY	1561	TCCATCTCTCTCGAAACAAATAATCTTCCACTTACAGATGACCCCTCAATCCCCATC	1620
DB	1640	TCCATCTCTCTCGAAACAAATAATCTTCCACTTACAGATGACCCCTCAATCCCCATC	1699
QY	1621	ATAATGGTGGTCCAGGAACCGGCATAGCCCCCGTTTATGGGGTTCTTACAAACATAGAGAG	1680
DB	1700	ATAATGGTGGTCCAGGAACCGGCATAGCCCCCGTTTATGGGGTTCTTACAAACATAGAGAG	1759
QY	1681	AAACTCCAAGAACAAACCCAGATGGAATTTTGGAGCAATGTGGTTGTTTTTGGCTGC	1740
DB	1760	AAACTCCAAGAACAAACCCAGATGGAATTTTGGAGCAATGTGGTTGTTTTTGGCTGC	1819
QY	1741	AGGCAATAGGATAGGGATATCTATTTCAGAAAAGAGCTCAGACATTTCCCTTAAGCATGGG	1800
DB	1820	AGGCAATAGGATAGGGATATCTATTTCAGAAAAGAGCTCAGACATTTCCCTTAAGCATGGG	1879
QY	1801	ATCTTAACTCATCTPAAAGGTTTCCTTCTCAAGAGATGCTCCTCTGCGGAGGAGGAAGCC	1860
DB	1880	ATCTTAACTCATCTPAAAGGTTTCCTTCTCAAGAGATGCTCCTCTGCGGAGGAGGAAGCC	1939
QY	1861	CCAGCAAAGTATGTGAAGAACAATCCAGCTTCATGGCCAGCAGGTGGCGGAATCCTC	1920
DB	1940	CCAGCAAAGTATGTGAAGAACAATCCAGCTTCATGGCCAGCAGGTGGCGGAATCCTC	1999
QY	1921	CTCCAGGAGAACGGCCATATTTATGTGTGTGGAGATGCAAAAGAAATATGGCCAAAGGATGA	1980
DB	2000	CTCCAGGAGAACGGCCATATTTATGTGTGTGGAGATGCAAAAGAAATATGGCCAAAGGATGA	2059
QY	1981	CATGATGCCCTTGTGCAAAATAAAGCAAAAGAGGTTGGAGTTGAAAACCTAGGAAGCAATG	2040
DB	2060	CATGATGCCCTTGTGCAAAATAAAGCAAAAGAGGTTGGAGTTGAAAACCTAGGAAGCAATG	2119
QY	2041	AAAAACCTGGCCATTTTAAAGAAGAAAAACCGTACCTTCAGGATATTTGGTCATAA	2097
DB	2120	AAAAACCTGGCCATTTTAAAGAAGAAAAACCGTACCTTCAGGATATTTGGTCATAA	2176

RESULT 3
US-08-905-233-71
; Sequence 71, Application US/08905223
; Patent No. 622029
; GENERAL INFORMATION:
; APPLICANT: Edwards, Jean-Baptiste D.
; APPLICANT: Duelt, Aymeric

APPLICANT: Lacroix, Bruno
TITLE OF INVENTION: 5' ESTS FOR SECRETED PROTEINS
NUMBER OF SEQUENCES: 503
CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson & Bear
CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92101-3505
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Win95
SOFTWARE: Word
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/905,223
FILING DATE:
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Israel, Ned A.
REGISTRATION NUMBER: 29,655
REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 235-8550
TELEFAX: (619) 235-0176
INFORMATION FOR SEQ ID NO: 71:
SEQUENCE CHARACTERISTICS:
LENGTH: 390 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: DOUBLE
TOPOLOGY: LINEAR
MOLECULE TYPE: CDNA
ORIGINAL SOURCE:
ORGANISM: Homo Sapiens
TISSUE TYPE: Brain
FEATURE:
NAME/KEY: sig_peptide
LOCATION: 289..357
IDENTIFICATION METHOD: Von Heijne matrix
OTHER INFORMATION: score 6.9
OTHER INFORMATION: seq SL5LLASHSVSC/SN
US-08-905-223-71

Query Match 18.4%; Score 386.4; DB 3; Length 390;
Best Local Similarity 99.7%; Pred. No. 7.9e-123;
Matches 387; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 968 AGGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGCACTGGCTCTTT 1027
Db 1 AGGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGCACTGGCTCTTT 60

QY 1028 TGAATAAAGGCAGACACAAAGAGAGAGGAGTACCTTTACCCAGCATATACCTGGCG 1087
Db 61 TGAATAAAGGCAGACACAAAGAGAGAGGAGTACCTTTACCCAGCATATACCTGGCG 120

QY 1088 GATGTTCTCCAGTTCATTTTACCTGGTGCTTGAATCCGAGCAATTCCTAAAGG 1147
Db 121 GATGTTCTCCAGTTCATTTTACCTGGTGCTTGAATCCGAGCAATTCCTAAAGG 180

QY 1148 CATTTTGGAGCCCTTGTGGACTATACAGTGCATGAAAGCGCAGGTACAGG 1207
Db 181 CATTTTGGAGCCCTTGTGGACTATACAGTGCATGAAAGCGCAGGTACAGG 240

QY 1208 AGCTGTGCAGTAACAAAGGGGAGCCGATATAGCCGCTTTGTACAGATGCTGTGCCT 1267
Db 241 AGCTGTGCAGTAACAAAGGGGAGCCGATATAGCCGCTTTGTACAGATGCTGTGCCT 300

QY 1268 GCTTGTGGATCTCCTCTGCTTTCCTTCTTGGCCAGCCACCTCAGTCTCCTGCTG 1327
Db 301 GCTTGTGGATCTCCTCTGCTTTCCTTCTTGGCCAGCCACCTCAGTCTCCTGCTG 360

QY 1328 AACATCTTCTAAACTTCAACCCAGACC 1355

Db 361 AACATCTTCTAAACTTCAACCCAGACC 388

RESULT 4
US-09-949-016-150019
; Sequence 150019, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150019
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150019

Query Match 18.1%; Score 380.6; DB 4; Length 601;
Best Local Similarity 99.7%; Pred. No. 1.1e-120;
Matches 380; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 401 GTTTAGAACTTGTGTTGAGCGGTGGATTGCTGGACTCTGCGCAGCCCTCAGAAAGCAT 460
Db 178 GTTTAGAACTTGTGTTGAGCGGTGGATTGCTGGACTCTGCGCAGCCCTCAGAAAGCAT 237

QY 461 TTAGTCAAGCAGAGACAGAGGAGATAAGTGGCGCACTCCCGTGGCATCACCTGCAT 520
Db 238 TTAGTCAAGCAGAGACAGAGGAGATAAGTGGCGCACTCCCGTGGCATCACCTGCAT 297

QY 521 CTTTGAGGACAGACCTTGTGAAGTCAGAGCTCTACATTCATTAATCTCAAGTCGAGCTTC 580
Db 298 CTTTGAGGACAGACCTTGTGAAGTCAGAGCTCTACATTCATTAATCTCAAGTCGAGCTTC 357

QY 581 TGAGATTGATGATTCAGAGAAAGGATTCGAGGTTTGAAGCAAAATGCAAGTGAACA 640
Db 358 TGAGATTGATGATTCAGAGAAAGGATTCGAGGTTTGAAGCAAAATGCAAGTGAACA 417

QY 641 GCAACCAATCCCAATGTTGAATTGAAGACTTTTGAGTCTCCTACCTACCCGTTCCGTTACCCC 700
Db 418 GCAACCAATCCCAATGTTGAATTGAAGACTTTTGAGTCTCCTACCTACCCGTTCCGTTACCCC 477

QY 701 CACTCTCAACGCTCTCTGAAATATTCCTGGTTTACCCCCAGAAATATTTACAGGTACATC 760
Db 478 CACTCTCAACGCTCTCTGAAATATTCCTGGTTTACCCCCAGAAATATTTACAGGTACATC 537

QY 761 TGCAGAGTCTCTTGGCCAGG 781
Db 538 TGCAGAGTCTCTTGGCCAGG 558

RESULT 5
US-09-949-016-15957
; Sequence 15957, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14

		Best Local Similarity 99.5%; Pred. No. 4.1e-120;		Matches 379; Conservative 1; Mismatches 0; Indels 0; Gaps 0;	
QY	401	GTTTAGAACTTGTGGTTGAGCGGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATT	460		
DB	165	GTTTAGAACTTGTGGTTGAGCGGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATT	224		
QY	461	TTAGGTCAAGCAGAGAGACAAGAGGAGATAAGTGGGGCACTCCCGTGGCATCACCCTGCAT	520		
DB	225	TTAGGTCAAGCAGAGAGACAAGAGGAGATAAGTGGGGCACTCCCGTGGCATCACCCTGCAT	284		
QY	521	CCTTGAGGACAGACCTTGTGAAGTCAGAGCTCTACACATTGAATCTCAAGTCGAGCTTC	580		
DB	285	CCTTGAGGACAGACCTTGTGAAGTCAGAGCTCTACACATTGAATCTCAAGTCGAGCTTC	344		
QY	581	TGAGATTTCGATGATTTCAGGAAGAAAGGATTCTGAGGTTTGAAGCAAAATGCAGTGAACA	640		
DB	345	TGAGATTTCGATGATTTCAGGAAGAAAGGATTCTGAGGTTTGAAGCAAAATGCAGTGAACA	404		
QY	641	GCAACCAATCCAAATGTTGAATTGAAGACTTTGAGTCTCTACCTTACCCGTTGGTACCCC	700		
DB	405	GCAACCAATCCAAATGTTGAATTGAAGACTTTGAGTCTCTACCTTACCCGTTGGTACCCC	464		
QY	701	CACCTCTCAAGCCTCTCTGAATATTTCTGGTTTACCCCAAGATATTTACAGGTACATC	760		
DB	465	CACCTCTCAAGCCTCTCTGAATATTTCTGGTTTACCCCAAGATATTTACAGGTACATC	524		
QY	761	TGCAGGAGTCTCTTGCCGAGG 781			
DB	525	TGCAGGAGTCTCTTGCCGAGG 545			
RESULT 7					
US-09-949-016-150037					
; Sequence 150037, Application US/09949016					
; Patent No. 6812339					
; GENERAL INFORMATION:					
; APPLICANT: VENTER, J. Craig et al.					
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED					
; FILE REFERENCE: CL001307					
; CURRENT APPLICATION NUMBER: US/09/949,016					
; CURRENT FILING DATE: 2000-04-14					
; PRIOR APPLICATION NUMBER: 60/241,755					
; PRIOR FILING DATE: 2000-10-20					
; PRIOR APPLICATION NUMBER: 60/237,768					
; PRIOR FILING DATE: 2000-10-03					
; PRIOR APPLICATION NUMBER: 60/231,498					
; PRIOR FILING DATE: 2000-09-08					
; NUMBER OF SEQ ID NOS: 207012					
; SOFTWARE: FastSeq for Windows Version 4.0					
; SEQ ID NO 150037					
; LENGTH: 601					
; TYPE: DNA					
; ORGANISM: Human					
US-09-949-016-150037					
Query Match		9.1%; Score 190.4; DB 4; Length 601;			
Best Local Similarity 99.5%; Pred. No. 1.1e-54;					
Matches 191; Conservative 0; Mismatches 1; Indels 0; Gaps 0;					
QY	1369	AGCTCAAGTTTATTTTCAAGGAAAGCTCCATTTTGTCTTCAACATTTGGAATTTCTG	1428		
DB	18	AGCTCAAGTTTATTTTCAAGGAAAGCTCCATTTTGTCTTCAACATTTGGAATTTCTG	77		
QY	1429	TCTACTGCCACAACAGAGGTTCTGGGAGGAGTATGTACAGGCTGGCTGGCTGTTG	1488		
DB	78	TCTACTGCCACAACAGAGGTTCTGGGAGGAGTATGTACAGGCTGGCTGGCTGTTG	137		
QY	1489	GTTGCTTTCAGTTCTTTCAGCCAAACATATCATGATCCATGAAGACAGCGGAAAGCCCTG	1548		
DB	138	GTTGCTTTCAGTTCTTTCAGCCAAACATATCATGATCCATGAAGACAGCGGAAAGCCCTG	197		

		Best Local Similarity 99.7%; Pred. No. 8.4e-119;		Matches 380; Conservative 0; Mismatches 1; Indels 0; Gaps 0;	
QY	401	GTTTAGAACTTGTGGTTGAGCGGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATT	460		
DB	10781	GTTTAGAACTTGTGGTTGAGCGGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATT	10840		
QY	461	TTAGGTCAAGCAGAGAGACAAGAGGAGATAAGTGGGGCACTCCCGTGGCATCACCCTGCAT	520		
DB	10841	TTAGGTCAAGCAGAGAGACAAGAGGAGATAAGTGGGGCACTCCCGTGGCATCACCCTGCAT	10900		
QY	521	CCTTGAGGACAGACCTTGTGAAGTCAGAGCTCTACACATTGAATCTCAAGTCGAGCTTC	580		
DB	10901	CCTTGAGGACAGACCTTGTGAAGTCAGAGCTCTACACATTGAATCTCAAGTCGAGCTTC	10960		
QY	581	TGAGATTTCGATGATTTCAGGAAGAAAGGATTCTGAGGTTTGAAGCAAAATGCAGTGAACA	640		
DB	10961	TGAGATTTCGATGATTTCAGGAAGAAAGGATTCTGAGGTTTGAAGCAAAATGCAGTGAACA	11020		
QY	641	GCAACCAATCCAAATGTTGAATTGAAGACTTTGAGTCTCTACCTTACCCGTTGGTACCCC	700		
DB	11021	GCAACCAATCCAAATGTTGAATTGAAGACTTTGAGTCTCTACCTTACCCGTTGGTACCCC	11080		
QY	701	CACCTCTCAAGCCTCTCTGAATATTTCTGGTTTACCCCAAGATATTTACAGGTACATC	760		
DB	11081	CACCTCTCAAGCCTCTCTGAATATTTCTGGTTTACCCCAAGATATTTACAGGTACATC	11140		
QY	761	TGCAGGAGTCTCTTGCCGAGG 781			
DB	11141	TGCAGGAGTCTCTTGCCGAGG 11161			
RESULT 6					
US-09-949-016-150020					
; Sequence 150020, Application US/09949016					
; Patent No. 6812339					
; GENERAL INFORMATION:					
; APPLICANT: VENTER, J. Craig et al.					
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED					
; FILE REFERENCE: CL001307					
; CURRENT APPLICATION NUMBER: US/09/949,016					
; CURRENT FILING DATE: 2000-04-14					
; PRIOR APPLICATION NUMBER: 60/241,755					
; PRIOR FILING DATE: 2000-10-20					
; PRIOR APPLICATION NUMBER: 60/237,768					
; PRIOR FILING DATE: 2000-10-03					
; PRIOR APPLICATION NUMBER: 60/231,498					
; PRIOR FILING DATE: 2000-09-08					
; NUMBER OF SEQ ID NOS: 207012					
; SOFTWARE: FastSeq for Windows Version 4.0					
; SEQ ID NO 150020					
; LENGTH: 601					
; TYPE: DNA					
; ORGANISM: Human					
US-09-949-016-150020					
Query Match		18.1%; Score 379; DB 4; Length 601;			


```
Patent No. 682888
GENERAL INFORMATION:
APPLICANT: Loring, Jeanne F.
APPLICANT: Tingley, Debora W.
APPLICANT: Edwards, Carla M.
TITLE OF INVENTION: GENES EXPRESSED IN ALZHEIMER'S DISEASE
FILE REFERENCE: PA-0024 US
CURRENT APPLICATION NUMBER: US/09/566,921
CURRENT FILING DATE: 2000-05-05
NUMBER OF SEQ ID NOS: 138
SOFTWARE: PERL Program
SEQ ID NO 88
LENGTH: 2475
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc feature
OTHER INFORMATION: Incyte ID No. 6682888 255828.26
NAME/KEY: unsure
LOCATION: 1001, 1011
OTHER INFORMATION: a, t, c, g, or other
US-09-566-921-88

Query Match
Best Local Similarity 8.3%; Score 174.4; DB 4; Length 2475;
Matches 178; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

QY 510 ATCACTGTCATCTTGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCA 569
Db 1 ATCACTGTCATCTCGAGACAGACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCA 60

QY 570 AGTCAGCTTTCAGATTCGATTCAGGAAAGGATTCGAGGTTTGAAGCAAAA 629
Db 61 AGTCAGCTTTCAGATTCGATTCAGGAAAGGATTCGAGGTTTGAAGCAAAA 120

QY 630 TCGAGTGAACAGCAACCAATCTGTAATGGAAGCTTGTAGTCTCACTTACCG 689
Db 121 TCGAGTGAACAGCAACCAATCTGTAATGGAAGCTTGTAGTCTCACTTACCG 180

QY 690 TTTCG 693
Db 181 TTTCG 184

RESULT 12
US-09-016-150030
Sequence 150030, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 150030
LENGTH: 601
TYPE: DNA
ORGANISM: Human
US-09-949-016-150030

Query Match
Best Local Similarity 7.4%; Score 154.8; DB 4; Length 601;
Matches 156; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 899 TTTCAAATACAGACTTTTCCTATCAGCTGGAGATGCTTTCAGCGTGATCTGCCCTAAACA 958
Db 151 TCTAGAATACAGACTTTTCCTATCAGCTGGAGATGCTTTCAGCGTGATCTGCCCTAAACA 210

QY 959 GTGATTCTGAGGTACAAAGCCTTCTCCAAAGACTCGAGCTTCAAGATAAAAGAGAGCACT 1018
Db 211 GTGATTCTGAGGTACAAAGCCTTCTCCAAAGACTCGAGCTTCAAGATAAAAGAGAGCACT 270

QY 1019 GCGTCCTTTTGAATAAAGGCAGACACAAAGAAGAAAGG 1058
Db 271 GCGTCCTTTTGAATAAAGGCAGACACAAAGAAGAAAGG 310

RESULT 13
US-09-949-016-150031
Sequence 150031, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 150031
LENGTH: 601
TYPE: DNA
ORGANISM: Human
US-09-949-016-150031

Query Match
Best Local Similarity 7.4%; Score 154.8; DB 4; Length 601;
Matches 156; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 899 TTTCAAATACAGACTTTTCCTATCAGCTGGAGATGCTTTCAGCGTGATCTGCCCTAAACA 958
Db 151 TCTAGAATACAGACTTTTCCTATCAGCTGGAGATGCTTTCAGCGTGATCTGCCCTAAACA 210

QY 959 GTGATTCTGAGGTACAAAGCCTTCTCCAAAGACTCGAGCTTCAAGATAAAAGAGAGCACT 1018
Db 211 GTGATTCTGAGGTACAAAGCCTTCTCCAAAGACTCGAGCTTCAAGATAAAAGAGAGCACT 270

QY 1019 GCGTCCTTTTGAATAAAGGCAGACACAAAGAAGAAAGG 1058
Db 271 GCGTCCTTTTGAATAAAGGCAGACACAAAGAAGAAAGG 310

RESULT 14
US-09-471-276-495
Sequence 495, Application US/09471276
Patent No. 6822072
GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Duclert A.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
FILE REFERENCE: GENSET.025CPI
Patent No. 6822072
CURRENT APPLICATION NUMBER: US/09/471,276
CURRENT FILING DATE: 1999-12-21
EARLIER APPLICATION NUMBER: 09/057,719
EARLIER FILING DATE: 1998-04-09
EARLIER APPLICATION NUMBER: 09/069,047
EARLIER FILING DATE: 1998-04-28
EARLIER APPLICATION NUMBER: PCT/IB99/00712
```

; EARLIER FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 1622
; SOFTWARE: Patent.pm
; SEQ ID NO 495
; LENGTH: 244
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 70..243
; NAME/KEY: sig_peptide
; LOCATION: 70..114
; OTHER INFORMATION: Von Heijne matrix
; OTHER INFORMATION: score 4.4000009536743
; OTHER INFORMATION: seq RFLLLVATQQQA/KA
US-09-471-276-495

Query Match 6.2%; Score 129.2; DB 4; Length 244;
Best Local Similarity 87.5%; Pred. No. 8.6e-34;
Matches 140; Conservative 1; Mismatches 19; Indels 0; Gaps 0;

QY 1 ATGAGGAGTTTCTGTACTATATGCTACACAGCAGGGACAGGCAAGGCCATCGCAGAA 60
DB 70 ATGAGGAGTTTCTGTACTATATGCTACACAGCAGGGACAGGCAAGGCCATCGCAGAA 129

QY 61 GAAATATGTGACAAGCTGTGTACATGGATTTTCTGCAGATCTTCACTGTATTAGTGAA 120
DB 130 GAAATGTGTAGCAAGCTGTGTACATGGATTTTCTGCAGATCTTCACTGTATTAGTGAA 189

QY 121 TCCGATAAGTATGACCTAAACCGAAACAGCTCTCTTTG 160
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; Sequence 150007, Application us/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150007
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150007

Query Match 6.1%; Score 128.6; DB 4; Length 601;
Best Local Similarity 99.2%; Pred. No. 2.9e-33;
Matches 128; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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Db 356 TCCGATAAG 364

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GenCore version 5.1.6
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OM nucleic acid search, using sw model

Run on: November 8, 2005, 16:35:10 ; Search time 1123.15 Seconds
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Title: US-09-371-347A-41

Perfect score: 2097

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Gapop 10.0 , Gapext 1.0

Searched: 9794790 seqs, 4134909567 residues

Total number of hits satisfying chosen parameters: 19589580

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Post-processing: Minimum Match 0%
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	2097	100.0	2097	26	US-11-119-096-41 Sequence 41, Appl
3	2095.4	99.9	2097	10	US-09-371-347-1 Sequence 1, Appl
4	2095.4	99.9	2097	26	US-11-119-096-1 Sequence 1, Appl
5	2095.4	99.9	3259	10	US-09-371-347-24 Sequence 24, Appl

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Db 301 TACACCTACTTTGCNAATGGGGGGAAGATAAATGATAAAGCACTTCAAGAGCTTGGAGCC 360
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RESULT 2

US-11-119-096-41
; Sequence 41, Application US/11119096
; Publication NO. US20050191701A1
; GENERAL INFORMATION:

Wed Nov 9 14:54:07 2005

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; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-41

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Qy	361	CGGCATTTCTATGACACTGGACATGTCAGATCACTGTGTAGGTTTAGAACTTGTGTTGAG	420	
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RESULT 3
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; Sequence 1, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE;
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-1

Query Match 99.9%; Score 2095.4; DB 10; Length 2097;
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Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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DB 1 ATGAGGAGGTTCTGTACTATATGCTACACAGCAGGAGCAGCAAGGCCATCGCAGAA 60
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QY 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAAACAGCAACCAATCCAATGTTGTA 660
DB 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAAACAGCAACCAATCCAATGTTGTA 660
QY 661 ATTTGAAGACTTTGAGTCTCACTTACCCTTCGCTACCCCACTCTCACAAGCCTCTCTG 720
DB 661 ATTTGAAGACTTTGAGTCTCACTTACCCTTCGCTACCCCACTCTCACAAGCCTCTCTG 720
QY 721 AATATTTCTGTGTTTACCCCAAGATATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 780
DB 721 AATATTTCTGTGTTTACCCCAAGATATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 780
QY 781 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTTCAGTGGCAATTTCAAAG 840
DB 781 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTTCAGTGGCAATTTCAAAG 840
QY 841 GCAGTTTCAACTTACTACGAATGATGCCATAAAAAACACTCTCTGTAGAAATTTGGACAT 900
DB 841 GCAGTTTCAACTTACTACGAATGATGCCATAAAAAACACTCTCTGTAGAAATTTGGACAT 900
QY 901 TCAATACAGACTTTTCTCTATCAGGCTGGAGATGCTTCAGGCTGATCTGCCCTAACAGT 960
DB 901 TCAATACAGACTTTTCTCTATCAGGCTGGAGATGCTTCAGGCTGATCTGCCCTAACAGT 960
QY 961 GATTCGTAGGTACAAAGCCCTACTCCTCAAGACTGCGAGCTTGAAGATAAAAGAGCAGCTGC 1020
DB 961 GATTCGTAGGTACAAAGCCCTACTCCTCAAGACTGCGAGCTTGAAGATAAAAGAGCAGCTGC 1020
QY 1021 GTCCCTTTGAAAATAAGGCACACAAAGAGAGGAGCTACCTTACCCAGCATATA 1080
DB 1021 GTCCCTTTGAAAATAAGGCACACAAAGAGAGGAGCTACCTTACCCAGCATATA 1080
QY 1081 CCGTGGGATGTTCTCTCCAGTTTCACTTGTGTGTTTGTGAAATCCGAGCAATTCCT 1140
DB 1081 CCGTGGGATGTTCTCTCCAGTTTCACTTGTGTGTTTGTGAAATCCGAGCAATTCCT 1140
QY 1141 AAAAGGCAATTTTGGAGCCCTTGTGACTATACCAAGTGACAGTGTCTGAAAGCCGAG 1200
DB 1141 AAAAGGCAATTTTGGAGCCCTTGTGACTATACCAAGTGACAGTGTCTGAAAGCCGAG 1200
QY 1201 CTACAGGAGCTGTGAGTAAACAAGGGCAGCCGATATAGCGCTTCTGACGATGCC 1260
DB 1201 CTACAGGAGCTGTGAGTAAACAAGGGCAGCCGATATAGCGCTTCTGACGATGCC 1260
QY 1261 TGTGCTGCTGTGTGGATCT 1320
DB 1261 TGTGCTGCTGTGTGGATCT 1320
QY 1321 CTGCTCGAATCTTCT 1380
DB 1321 CTGCTCGAATCTTCT 1380

1381 QY TTTACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
1381 Db TTTACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
1441 QY ACAGAGTTCTCGGGAAGGAGTATGTACAGGCTGGCTGTGGCTTGTGGTCTCAGTT 1500
1441 Db ACAGAGTTCTCGGGAAGGAGTATGTACAGGCTGGCTGTGGCTTGTGGTCTCAGTT 1500
1501 QY CTTAGCCAAACATACATGCATCCCATGAAGACAGCGGAAAGCCCTGCTCCTAAGATA 1560
1501 Db CTTAGCCAAACATACATGCATCCCATGAAGACAGCGGAAAGCCCTGCTCCTAAGATA 1560
1561 QY TCCATCTCTCTCGAACAACAAATTTCTTCCACTTACAGATGAGCCCTCAATCCCATC 1620
1561 Db TCCATCTCTCTCGAACAACAAATTTCTTCCACTTACAGATGAGCCCTCAATCCCATC 1620
1621 QY ATAAATGGTGGTCCAGAACCCGATAGCCCGTTTATTTGGGTTCTTCAACATAGAGAG 1680
1621 Db ATAAATGGTGGTCCAGAACCCGATAGCCCGTTTATTTGGGTTCTTCAACATAGAGAG 1680
1681 QY AAACCTCCAAAGAACACACCCAGATGGAATTTTGGAGCAATGTGTGTTTGGCTGC 1740
1681 Db AAACCTCCAAAGAACACACCCAGATGGAATTTTGGAGCAATGTGTGTTTGGCTGC 1740
1741 QY AGGCATAAGGATAGGATTTATCTTTCAGAAAAGAGCTCAGACATTTCTTAAGCATGGG 1800
1741 Db AGGCATAAGGATAGGATTTATCTTTCAGAAAAGAGCTCAGACATTTCTTAAGCATGGG 1800
1801 QY ATCTTAACCTCANTCAAGAGTTTCTTCTCAAGAGATGCTCCTGTTGGGAGGAGGAGCC 1860
1801 Db ATCTTAACCTCANTCAAGAGTTTCTTCTCAAGAGATGCTCCTGTTGGGAGGAGGAGCC 1860
1861 QY CCAGCAAAGTATGTCAAGACAAACATCCAGCTTTCATGGCCAGCAGGTGGCGAGATCCTC 1920
1861 Db CCAGCAAAGTATGTCAAGACAAACATCCAGCTTTCATGGCCAGCAGGTGGCGAGATCCTC 1920
1921 QY CTTCCAGGAGAACGCCATATTTATTTGTGTGGAGATGCAAGAAATATGCCCAGGATGTA 1980
1921 Db CTTCCAGGAGAACGCCATATTTATTTGTGTGGAGATGCAAGAAATATGCCCAGGATGTA 1980
1981 QY CATGATGCCCTTGTGCAATAATAAGCAAGAGTTTGGAGTTGAAATACTAGAACATG 2040
1981 Db CATGATGCCCTTGTGCAATAATAAGCAAGAGTTTGGAGTTGAAATACTAGAACATG 2040
2041 QY AAAACCTCGCCACTTTAAAGAAAGAAAACGCTACTTTCAGGATATTTGGTCATAA 2097
2041 Db AAAACCTCGCCACTTTAAAGAAAGAAAACGCTACTTTCAGGATATTTGGTCATAA 2097

RESULT 4
US-11-119-096-1
; Sequence 1, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; FILE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16

; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-1

Query Match 99.9%; Score 2095.4; DB 26; Length 2097;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGACGAGGTTTCTGTACTATATCTACACAGCAGGACAGGCAAGCCATCGCAGAA 60
Db 1 ATGACGAGGTTTCTGTACTATATCTACACAGCAGGACAGGCAAGCCATCGCAGAA 60
QY 61 GAAATATGTGACCAAGCTGTGTATCATGATTTCTGACAGATCTTTCACATGTTACTGTAA 120
Db 61 GAAATGTGTGACCAAGCTGTGTATCATGATTTCTGACAGATCTTTCACATGTTACTGTAA 120
QY 121 TCCGATAAGTATGACCTTAAACACCGAAACAGCTCCTCTTGTGTTGTGTTTCTACACG 180
Db 121 TCCGATAAGTATGACCTTAAACACCGAAACAGCTCCTCTTGTGTTGTGTTTCTACACG 180
QY 181 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 181 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
QY 241 CTGCGGTTGATTTCTTGTCTCACCTGCGGTATGTTTACTGGTCTCGGTGATTGAGAA 300
Db 241 CTGCGGTTGATTTCTTGTCTCACCTGCGGTATGTTTACTGGTCTCGGTGATTGAGAA 300
QY 301 TACACCTACTTTTGCATTTGGGGGGAAGATAATTTGATAAACAAGCTTCAAGAGCTTGGAGCC 360
Db 301 TACACCTACTTTTGCATTTGGGGGGAAGATAATTTGATAAACAAGCTTCAAGAGCTTGGAGCC 360
QY 361 CGGCATTTCTATGACACTGGACATGACATGATCTGTAGTTTGTAGAACTTGTGTTGAG 420
Db 361 CGGCATTTCTATGACACTGGACATGACATGATCTGTAGTTTGTAGAACTTGTGTTGAG 420
QY 421 CCGTCGATTTGCTGGACTCTGCGCAGCCCTCAGAAAGACTTTTGTAGGTCAAGAGAGACAA 480
Db 421 CCGTCGATTTGCTGGACTCTGCGCAGCCCTCAGAAAGACTTTTGTAGGTCAAGAGAGACAA 480
QY 481 GAGGAGATAAGTGGGCGACTCCCGGTGGCATCACCTGCACTCTTGGAGACAGACCTTGTG 540
Db 481 GAGGAGATAAGTGGGCGACTCCCGGTGGCATCACCTGCACTCTTGGAGACAGACCTTGTG 540
QY 541 AAGTCAGAGCTGCTACATTAATCTCAAGTCGAGCTTCTGAGATTCGATGATTGAGGA 600
Db 541 AAGTCAGAGCTGCTACATTAATCTCAAGTCGAGCTTCTGAGATTCGATGATTGAGGA 600
QY 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCCAATGTTGA 660
Db 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCCAATGTTGA 660
QY 661 ATTGAAGACTTTGAGTCTCTTACCTTACCCGTTCCGTTACCCCTCTCTCAAGCCTCTCTG 720
Db 661 ATTGAAGACTTTGAGTCTCTTACCTTACCCGTTCCGTTACCCCTCTCTCAAGCCTCTCTG 720
QY 721 AATATTCTGGTTTACCCCGAGAAATTTACAGGTATACATCTGACAGAGTCTCTTGGCCAG 780
Db 721 AATATTCTGGTTTACCCCGAGAAATTTACAGGTATACATCTGACAGAGTCTCTTGGCCAG 780
QY 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTCAGTGCATTTCAAAG 840
Db 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTCAGTGCATTTCAAAG 840
QY 841 GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTCTGTTGTAGAAATTTGACATT 900
Db 841 GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTCTGTTGTAGAAATTTGACATT 900
QY 901 TCAAAATACAGACTTTTCTTCTATCAGCCTGGAGATGCTTCCAGCGTGAATCTGCCCTAACAGT 960

Db 901 TCAATACAGACTTTTCCCTATCAGCCTGGAGATGCCTTCAGCGTGATCTGCCCTAACAGT 960
Qy 961 GATTCTGAGGTACAAAGCCTACTCCAAAGACTGCGAGCTTGAAGATAAAGAGAGAGCACTGC 1020
Db 961 GATTCTGAGGTACAAAGCCTACTCCAAAGACTGCGAGCTTGAAGATAAAGAGAGAGCACTGC 1020
Qy 1021 GTCCCTTTCAAATAAAGGAGAGACAAAGAGAAAGAGAGCTACCTTACCCAGCATATA 1080
Db 1021 GTCCCTTTGAAATAAAGGAGAGACAAAGAGAAAGAGAGCTACCTTACCCAGCATATA 1080
Qy 1081 CTGCGGGAGTGTCTCTCCAGTTCATTTTACCTGGTCTTGAATCCGAGCAATTCCT 1140
Db 1081 CTGCGGGAGTGTCTCTCCAGTTCATTTTACCTGGTCTTGAATCCGAGCAATTCCT 1140
Qy 1141 AAAAAGGCATTTTGGAGGCCCTTGGGACTATACAGTGACAGTGTCTGAAAGGCGAGG 1200
Db 1141 AAAAAGGCATTTTGGAGGCCCTTGGGACTATACAGTGACAGTGTCTGAAAGGCGAGG 1200
Qy 1201 CTACAGGAGCTGTGCAGTAAACAAGGGGAGCGGATATAGCGCTTTGTACGAGATGCC 1260
Db 1201 CTACAGGAGCTGTGCAGTAAACAAGGGGAGCGGATATAGCGCTTTGTACGAGATGCC 1260
Qy 1261 TGTGCTGCTGTGTGGATCTCTCTCGCTTTCCCTTTCTTGGCAGCCACCACTCACTCTC 1320
Db 1261 TGTGCTGCTGTGTGGATCTCTCTCGCTTTCCCTTTCTTGGCAGCCACCACTCACTCTC 1320
Qy 1321 CTGCTGGAACATCTTCTTAACTTCAACCCAGACCATATTCGTGCGAAGCTCAAGTTTA 1380
Db 1321 CTGCTGGAACATCTTCTTAACTTCAACCCAGACCATATTCGTGCGAAGCTCAAGTTTA 1380
Qy 1381 TTTTACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGAAATTTCTGCTACTCGCAC 1440
Db 1381 TTTTACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGAAATTTCTGCTACTCGCAC 1440
Qy 1441 ACAGAGTTCTCGGGAAGGAGTATGTACAGGCTGGCTGGCCCTTTGTGGTGTGCTCAGTT 1500
Db 1441 ACAGAGTTCTCGGGAAGGAGTATGTACAGGCTGGCTGGCCCTTTGTGGTGTGCTCAGTT 1500
Qy 1501 CTTTACGCCAAACATACATGATCCCATGAAGACAGCGGGAAGCCCTCGCTCTTAAGATA 1560
Db 1501 CTTTACGCCAAACATACATGATCCCATGAAGACAGCGGGAAGCCCTCGCTCTTAAGATA 1560
Qy 1561 TCCATCTCTCTCGAACAACATTTCTTCCATTTACAGATGACCCCTCAATCCCCATC 1620
Db 1561 TCCATCTCTCTCGAACAACATTTCTTCCATTTACAGATGACCCCTCAATCCCCATC 1620
Qy 1621 ATAATGGTGGTCCAGGAACCGGCATAGCCCGCTTTATTGGGTTCCTACAAACATAGAG 1680
Db 1621 ATAATGGTGGTCCAGGAACCGGCATAGCCCGCTTTATTGGGTTCCTACAAACATAGAG 1680
Qy 1681 AAATCTCAAGAACAAACCCAGATGGAATTTTGGAGCAATGTGGTGTGTTTTTGGCTGC 1740
Db 1681 AAATCTCAAGAACAAACCCAGATGGAATTTTGGAGCAATGTGGTGTGTTTTTGGCTGC 1740
Qy 1741 AGGCATAAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
Db 1741 AGGCATAAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
Qy 1801 ATCTTAACTCATCTAAAGGTTTCTCTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1860
Db 1801 ATCTTAACTCATCTAAAGGTTTCTCTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1860
Qy 1861 CCAGAAAGTATGTACAGAACATTCAGCTTCTGCGCAGCAGCAGTGGCGAATTCCTC 1920
Db 1861 CCAGAAAGTATGTACAGAACATTCAGCTTCTGCGCAGCAGCAGTGGCGAATTCCTC 1920
Qy 1921 CTTCCAGGAGACGGCCATATTATGTGTGGAGATGCAAGAAATATGSCCAAGGATGA 1980
Db 1921 CTTCCAGGAGACGGCCATATTATGTGTGGAGATGCAAGAAATATGSCCAAGGATGA 1980
Qy 1981 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGGAATTCAGATTCAGATG 2040

Db 1981 CATGATGCCCTTGTGCAAAATAATAAGCAAAAGAGGTTGGAGTTGAAAAAATAAGCAATG 2040
Qy 2041 AAAACCCCTGGCCACTTTTAAAGAGAAAAACGCTACCTTCAGGATATTGGTTCATAA 2097
Db 2041 AAAACCCCTGGCCACTTTTAAAGAGAAAAACGCTACCTTCAGGATATTGGTTCATAA 2097
RESULT 5
US-09-371-347-24
; Sequence 24, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE;
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PastSeq for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-24
Query Match 99.9%; Score 2095.4; DB 10; Length 3259;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1 ATGAGAGGTTTCTGTACTATATGCTACACAGCAGGACAGGCAAAAGGCCATCGCAGAA 60
Db 80 ATGAGAGGTTTCTGTACTATATGCTACACAGCAGGACAGGCAAAAGGCCATCGCAGAA 139
Qy 61 GAAATATGTGAGCAAGCTGTGTGATCATGGATTTTCTGCAGATCTTCACTGTATTAGTGAA 120
Db 140 GAAATGTGTGAGCAAGCTGTGTGATCATGGATTTTCTGCAGATCTTCACTGTATTAGTGAA 199
Qy 121 TCCGATAAGTATGACTTAAAAACCGAAACAGCTCTCTTGTGTTGTGGTTCTACACAG 180
Db 200 TCCGATAAGTATGACTTAAAAACCGAAACAGCTCTCTTGTGTTGTGGTTCTACACAG 259
Qy 181 GGCACCGGAGACCCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAAACCAACA 240
Db 260 GGCACCGGAGACCCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAAACCAACA 319
Qy 241 CTGCGGTTGATTTCTTTGCTCACCTGCGGTATGGGTTACTGGTCTCGGTGATTAGAA 300
Db 320 CTGCGGTTGATTTCTTTGCTCACCTGCGGTATGGGTTACTGGTCTCGGTGATTAGAA 379
Qy 301 TACACCTACTTTTGAATGGGGGAGATAAATGTATAACGACTTCAAGAGCTTGGAGCC 360
Db 380 TACACCTACTTTTGAATGGGGGAGATAAATGTATAACGACTTCAAGAGCTTGGAGCC 439
Qy 361 CGGCATTTCTATGACATGCGATGATGATGATGATGATGATGATGATGATGATGATGATG 420
Db 440 CGGCATTTCTATGACATGCGATGATGATGATGATGATGATGATGATGATGATGATGATG 499
Qy 421 CGGTGATTTGCTGGACTCTGGCCCGCCCTCAGAAAGCATTTTAGTCAAGCAGAGACAA 480
Db 500 CGGTGATTTGCTGGACTCTGGCCCGCCCTCAGAAAGCATTTTAGTCAAGCAGAGACAA 559
Qy 481 GAGGAGATAAGTGGGCGACTCCCGGTGGCATCACCTGTCATCTTGGAGGACAGACCTTGTG 540
Db 560 GAGGAGATAAGTGGGCGACTCCCGGTGGCATCACCTGTCATCTTGGAGGACAGACCTTGTG 619
Qy 541 AAGTCAGAGCTCTACACATTCGAATTCCTCAAGTCGAGCTTCTGAGATTCGATTCAGGA 600

Db 620 AAGTCAGAGCTGCTACACATTCGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 679
Qy 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGTA 660
Db 680 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGTA 739
Qy 661 ATTGAAGACTTTGAGTCTCACTTACCCTGTTGGTACCCCACTCTCACAGCCTCTCTG 720
Db 740 ATTGAAGACTTTGAGTCTCACTTACCCTGTTGGTACCCCACTCTCACAGCCTCTCTG 799
Qy 721 AATATTTCTGTTTAACTCCCAAGATATTTACAGGTACATCTCGAGGAGTCTCTGGCCAG 780
Db 800 AATATTTCTGTTTAACTCCCAAGATATTTACAGGTACATCTCGAGGAGTCTCTGGCCAG 859
Qy 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCTTCAAG 840
Db 860 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCTTCAAG 919
Qy 841 GCAGTTCAACTTACTACGAATGATGCGCATATAAAACCACTCTCTGCTGGTAGAATTTGACATT 900
Db 920 GCAGTTCAACTTACTACGAATGATGCGCATATAAAACCACTCTCTGCTGGTAGAATTTGACATT 979
Qy 901 TCAATATACAGACTTTTCTCTATCAGCTCGAGATGCTTCAGCGTGATCTGCCCTAACAGT 960
Db 980 TCAATATACAGACTTTTCTCTATCAGCTCGAGATGCTTCAGCGTGATCTGCCCTAACAGT 1039
Qy 961 GATTTCTGAGGTACAAAGCCTACTCCAAAGACTGCACTTTGAAGATAAAAGAGAGCACTGC 1020
Db 1040 GATTTCTGAGGTACAAAGCCTACTCCAAAGACTGCACTTTGAAGATAAAAGAGAGCACTGC 1099
Qy 1021 GTCTTTTGAATAAAGGAGACACAAAGAGAAAGAGGAGTACCTTACCCCAAGCATATA 1080
Db 1100 GTCTTTTGAATAAAGGAGACACAAAGAGAAAGAGGAGTACCTTACCCCAAGCATATA 1159
Qy 1081 CCGTGGGAGTGTCTCTCAGTTCAATTTTCTGCTGCTTGAATCCGAGCAATTCCT 1140
Db 1160 CCGTGGGAGTGTCTCTCAGTTCAATTTTCTGCTGCTTGAATCCGAGCAATTCCT 1219
Qy 1141 AAAAAGGACATTTTTCGAGCCCTTGTGACTATACAGTGACAGTGTCTGAAAGGCGAGG 1200
Db 1220 AAAAAGGACATTTTTCGAGCCCTTGTGACTATACAGTGACAGTGTCTGAAAGGCGAGG 1279
Qy 1201 CTACAGGAGCTGTGAGTAAACAAAGGGGAGCGGATTAAGCGGCTTTGTACAGATGCC 1260
Db 1280 CTACAGGAGCTGTGAGTAAACAAAGGGGAGCGGATTAAGCGGCTTTGTACAGATGCC 1339
Qy 1261 TGTGCTGCTGCTGTGATCT 1320
Db 1340 TGTGCTGCTGCTGTGATCT 1399
Qy 1321 CTGCTCGAATCTTCTCTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1400 CTGCTCGAATCTTCTCTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1459
Qy 1381 TTTCACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
Db 1460 TTTCACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1519
Qy 1441 ACAGAGGTTCTCGGAGGAGTATGTACAGGCTGCTGCTCTCTCTCTCTCTCTCTCTCTCT 1500
Db 1520 ACAGAGGTTCTCGGAGGAGTATGTACAGGCTGCTGCTCTCTCTCTCTCTCTCTCTCTCT 1579
Qy 1501 CTTTCAGCAACATACATCATCTCCATGAAGACAGCGGAAAGCCCTGCTCTCTAAGATA 1560
Db 1580 CTTTCAGCAACATACATCATCTCCATGAAGACAGCGGAAAGCCCTGCTCTCTAAGATA 1639
Qy 1561 TCCATCTCTCTCGAACAACAAATTTCTTCCATTTACAGATGACCCCTCAATCCCCATC 1620
Db 1640 TCCATCTCTCTCGAACAACAAATTTCTTCCATTTACAGATGACCCCTCAATCCCCATC 1699
Qy 1621 ATATGTTGGTTCAGGAAACCGGCATAGCCCGTTTATTTGGGTTCTTACAAATAGAGAG 1680
Db 1700 ATATGTTGGTTCAGGAAACCGGCATAGCCCGTTTATTTGGGTTCTTACAAATAGAGAG 1759

Qy 1681 AAATCTCAAGAACAAACACCCAGATGGAATTTTGGAGCAATGTGTGTGTTTTTGGCTGC 1740
Db 1760 AAATCTCAAGAACAAACACCCAGATGGAATTTTGGAGCAATGTGTGTGTTTTTGGCTGC 1819
Qy 1741 AGGCATATAGGATAGGATTTATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
Db 1820 AGGCATATAGGATAGGATTTATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1879
Qy 1801 ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCTCTTGGGAGGAGGAAGCC 1860
Db 1880 ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCTCTTGGGAGGAGGAAGCC 1939
Qy 1861 CCAGCAAAAGTATGTACAAGCAACATCCAGCTTCTATGCGCAGAGTGGCGGAGATCTCTC 1920
Db 1940 CCAGCAAAAGTATGTACAAGCAACATCCAGCTTCTATGCGCAGAGTGGCGGAGATCTCTC 1999
Qy 1921 CTCCAGGAGAGCGGCATATTTATGCTGTGAGATGCAAAAGATATGCGCAAGGATGTA 1980
Db 2000 CTCCAGGAGAGCGGCATATTTATGCTGTGAGATGCAAAAGATATGCGCAAGGATGTA 2059
Qy 1981 CATGATGCCCTTGTGCAATATAAGCAAAAGAGGTTGGAGTTGAAAAAAGTAAAGCAATG 2040
Db 2060 CATGATGCCCTTGTGCAATATAAGCAAAAGAGGTTGGAGTTGAAAAAAGTAAAGCAATG 2119
Qy 2041 AAAACCTGGCCACTTTAAAGAGAAAGAAACGCTACCTTCAGGATATTTGGTCATAA 2097
Db 2120 AAAACCTGGCCACTTTAAAGAGAAAGAAACGCTACCTTCAGGATATTTGGTCATAA 2176

RESULT 6

US-10-450-763-874
; Sequence 874, Application US/10450763
; Publication No. US20050196754A1
; GENERAL INFORMATION:
; APPLICANT: Hyseq, Inc
; TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
; FILE REFERENCE: 790CIP3/US
; CURRENT APPLICATION NUMBER: US/10/450,763
; CURRENT FILING DATE: 2003-06-11
; PRIOR APPLICATION NUMBER: PCT/US01/08631
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/540,217
; PRIOR FILING DATE: 2000-03-31
; PRIOR APPLICATION NUMBER: 09/649,167
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 60736
; SOFTWARE: Custom
; SEQ ID NO 874
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SIMILAR
; LOCATION: (80)..(2173)
; OTHER INFORMATION: 100% homologous to Homo sapiens methionine synthase
; OTHER INFORMATION: reductase, accession number AF025794, Smith-Waterman Score=3624.
US-10-450-763-874

Query Match 99.9%; Score 2095.4; DB 24; Length 3259;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1 ATGAGAGGTTTCTGTACTATATGCTACACAGCAGGACGCAAGCCATCGCAGAA 60
Db 80 ATGAGAGGTTTCTGTACTATATGCTACACAGCAGGACGCAAGCCATCGCAGAA 139
Qy 61 GAAATATGTGACAAAGCTGTGTACATGATTTTCTGCAGATCTTCACTGTATTAGTGAA 120
Db 140 GAAATGTGTGACAAAGCTGTGTACATGATTTTCTGCAGATCTTCACTGTATTAGTGAA 199
Qy 121 TCCGATATAGTATGACTTAAAAACCGAAACAGCTCTCTTGTGTTGTTGTTCTTACCAGC 180

Db 200 TCCGATAGATGACTAAAAACCGAAACAGCTCCTCTGTTGTTGTTCTTACCAG 259
Qy 181 GGCACGGAGACCCACCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 260 GGCACGGAGACCCACCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 319
Qy 241 CTGCGGTTGATTTCTTTGCTCACCTCGGTGAGTTACTGGTCTCGGTGATTCAGAA 300
Db 320 CTGCGGTTGATTTCTTTGCTCACCTCGGTGAGTTACTGGTCTCGGTGATTCAGAA 379
Qy 301 TACACCTACTTTTGAATGGGGGAGATAAATGATAACGACTTCAAGAGCTTGGAGCC 360
Db 380 TACACCTACTTTTGAATGGGGGAGATAAATGATAACGACTTCAAGAGCTTGGAGCC 439
Qy 361 CGGCATTTCTATGACACTGGACATGAGATGACTGTAGGTTTAGAACTTGTGTTGAG 420
Db 440 CGGCATTTCTATGACACTGGACATGAGATGACTGTAGGTTTAGAACTTGTGTTGAG 499
Qy 421 CGGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA 480
Db 500 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA 559
Qy 481 GAGGAGATAAGTGGGCACTCCGGTGGCATCACCTGCATCTTGAAGGACAGACCTTGTG 540
Db 560 GAGGAGATAAGTGGGCACTCCGGTGGCATCACCTGCATCTTGAAGGACAGACCTTGTG 619
Qy 541 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATCAGGA 600
Db 620 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATCAGGA 679
Qy 601 AGAAAGGATCTGAGGTTTGAAGCAAAATGAGTGACAGCAACCAATCCAAATGTTGA 660
Db 680 AGAAAGGATCTGAGGTTTGAAGCAAAATGAGTGACAGCAACCAATCCAAATGTTGA 739
Qy 661 ATTGAAGACTTTGAGTCTCACTTACCCTTCGGTACCCCACTCTCAACGCTCTCTG 720
Db 740 ATTGAAGACTTTGAGTCTCACTTACCCTTCGGTACCCCACTCTCAACGCTCTCTG 799
Qy 721 AATATCTCGTTTACCCCAAGAAATTTACAGGTACATCTCGAGGAGTCTCTGGCCAG 780
Db 800 AATATCTCGTTTACCCCAAGAAATTTACAGGTACATCTCGAGGAGTCTCTGGCCAG 859
Qy 781 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATCCAGTTTTCAGTGCCAAATTTCAAAG 840
Db 860 GAGGAAAGCAAGTATCTGTGACTTCAGCAGATCCAGTTTTCAGTGCCAAATTTCAAAG 919
Qy 841 GCAGTTCAAATTTACTACGAATGATGCCATAAAAAACCACTCTGCTGCTAGAAATGGACATT 900
Db 920 GCAGTTCAAATTTACTACGAATGATGCCATAAAAAACCACTCTGCTGCTAGAAATGGACATT 979
Qy 901 TCAAAATACAGACTTTTCTATCAGCTGGAGATGCTTCAGGCTGATCTGCCCTAACAGT 960
Db 980 TCAAAATACAGACTTTTCTATCAGCTGGAGATGCTTCAGGCTGATCTGCCCTAACAGT 1039
Qy 961 GATTCCTGAGGTAAAGCCCTACTCCAAAGACTGACGTTGAAGATAAAGAGACGACTGC 1020
Db 1040 GATTCCTGAGGTAAAGCCCTACTCCAAAGACTGACGTTGAAGATAAAGAGAGACGACTGC 1099
Qy 1021 GTCCCTTTTGAATAAAGCAGACACAAAGAAAGAGGAGCTACCTTACCCAGCATATA 1080
Db 1100 GTCCCTTTTGAATAAAGCAGACACAAAGAAAGAGGAGCTACCTTACCCAGCATATA 1159
Qy 1081 CTGCGGGATGTTCTTCAGTTCAATTTTACCTGGTCTTGAATTCGAGCAATTCCT 1140
Db 1160 CTGCGGGATGTTCTTCAGTTCAATTTTACCTGGTCTTGAATTCGAGCAATTCCT 1219
Qy 1141 AAAAAGGCAATTTTTCGAGCCCTTGTGGACTATACAGTGACAGTGCTGAAAAGCGCAG 1200
Db 1220 AAAAAGGCAATTTTTCGAGCCCTTGTGGACTATACAGTGACAGTGCTGAAAAGCGCAG 1279
Qy 1201 CTACAGGAGCTGTGAGTAAACAAGGGGCGAGCTTATAGCCGCTTTGTACGAGATGCC 1260
Db 1280 CTACAGGAGCTGTGAGTAAACAAGGGGCGAGCTTATAGCCGCTTTGTACGAGATGCC 1339

Qy 1261 TGTGCTGCTGTTGGATCTCCTCTCGCTTTCCTTTCCTTCCCTTTCCTGCCAGCCACCCTCAGTCTC 1320
Db 1340 TGTGCTGCTGTTGGATCTCCTCTCGCTTTCCTTTCCTTTCCTGCCAGCCACCCTCAGTCTC 1399
Qy 1321 CTGCTCGAACATCTTCTTAAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGATTTA 1380
Db 1400 CTGCTCGAACATCTTCTTAAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGATTTA 1459
Qy 1381 TTTTACCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
Db 1460 TTTTACCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1519
Qy 1441 ACAGAGGTTCTGCGAAGGGAGTATGTACAGGCTGGCTGGCTTCTGTTGCTTTCAGTT 1500
Db 1520 ACAGAGGTTCTGCGAAGGGAGTATGTACAGGCTGGCTGGCTTCTGTTGCTTTCAGTT 1579
Qy 1501 CTTTACGCCAAACATACATGCTCCATCAAGACACGGGAAAGCCCTGGCTCCTAAGATA 1560
Db 1580 CTTTACGCCAAACATACATGCTCCATCAAGACACGGGAAAGCCCTGGCTCCTAAGATA 1639
Qy 1561 TCCATCTCTCTCGAACCAAAATTTCTTCCATTTACAGATGACCCCTCAATCCCATC 1620
Db 1640 TCCATCTCTCTCGAACCAAAATTTCTTCCATTTACAGATGACCCCTCAATCCCATC 1699
Qy 1621 ATAATGGTGGTCCAGGAACCGGCATAGCCCGTTTATTTGGTTTCTTACAAATAGAGAG 1680
Db 1700 ATAATGGTGGTCCAGGAACCGGCATAGCCCGTTTATTTGGTTTCTTACAAATAGAGAG 1759
Qy 1681 AAATCTCCAAAGAACACACCCAGATGGAATTTTGAGCAATTTGTGTTGTTTGGCTGC 1740
Db 1760 AAATCTCCAAAGAACACACCCAGATGGAATTTTGAGCAATTTGTGTTGTTTGGCTGC 1819
Qy 1741 AGGCATAAGGATAGGATTTATCTATTCAAAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
Db 1820 AGGCATAAGGATAGGATTTATCTATTCAAAAAGAGCTCAGACATTTCTTAAAGCATGG 1879
Qy 1801 ATCTTAACTCATCTAAAGTTTCTCTCAAGAGATGCTCTGTTGGGGAGGAGGAGCC 1860
Db 1880 ATCTTAACTCATCTAAAGTTTCTCTCAAGAGATGCTCTGTTGGGGAGGAGGAGCC 1939
Qy 1861 CCAGCAAAAGTATGTACAAAGACAAATCCAGCTTCAATGCGCAGCAGTGGCAGAAATCCCTC 1920
Db 1940 CCAGCAAAAGTATGTACAAAGACAAATCCAGCTTCAATGCGCAGCAGTGGCAGAAATCCCTC 1999
Qy 1921 CTCCAGGAGAACCGCCATATTTATGTGTGAGATGCAAGAATATGSCCAAGGATGTA 1980
Db 2000 CTCCAGGAGAACCGCCATATTTATGTGTGAGATGCAAGAATATGSCCAAGGATGTA 2059
Qy 1981 CATGATGCCCTTGTCAAATTAATAGCAAGAGGTTGGAGTTGAAAACCTAGAACCAATG 2040
Db 2060 CATGATGCCCTTGTCAAATTAATAGCAAGAGGTTGGAGTTGAAAACCTAGAACCAATG 2119
Qy 2041 AAAACCCCTGGCCACTTTAAAAGAAAAACCGTACCTTCCAGTATTTGGTCAATA 2097
Db 2120 AAAACCCCTGGCCACTTTAAAAGAAAAACCGTACCTTCCAGTATTTGGTCAATA 2176

RESULT 7

US-11-119-096-24

; Sequence 24, Application US/11119096

; Publication No. US20050191701A1

; GENERAL INFORMATION:

; APPLICANT: Gravel, Roy A,

; APPLICANT: Rozen, Rima

; APPLICANT: Leclerc, Daniel

; APPLICANT: Wilson, Aaron

; APPLICANT: Rosenblatt, David

; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:

; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE

; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME

; FILE REFERENCE: 50004/003005

; CURRENT APPLICATION NUMBER: US/11/119,096

CURRENT FILING DATE: 2005-04-29
PRIOR APPLICATION NUMBER: 09/487,841
PRIOR FILING DATE: 2000-01-19
PRIOR APPLICATION NUMBER: 09/371,347
PRIOR FILING DATE: 1999-08-10
PRIOR APPLICATION NUMBER: 09/232,028
PRIOR FILING DATE: 1999-01-15
PRIOR APPLICATION NUMBER: 60/071,622
PRIOR FILING DATE: 1998-01-16
NUMBER OF SEQ ID NOS: 63
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 24
LENGTH: 3259
TYPE: DNA
ORGANISM: Homo sapiens
US-11-119-096-24

Query Match 99.9%; Score 2095.4; DB 26; Length 3259;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY	1	ATGAGGAGGTTCTGTTACTATATGCTACACAGCAGGACAGGCAAGGCCATCGCAGAA	60
DB	80	ATGAGGAGGTTCTGTTACTATATGCTACACAGCAGGACAGGCAAGGCCATCGCAGAA	139
QY	61	GAATATGTGAGCAAGCTGTGTGATCATGATTTCTGAGATCTTCACTGTATTAGTGAA	120
DB	140	GAATGTGTGAGCAAGCTGTGTGATCATGATTTCTGAGATCTTCACTGTATTAGTGAA	199
QY	121	TCCGATAAGTATGACCTAAACCGGAAACAGCTCCTCTGTTGTTGTTCTACACAG	180
DB	200	TCCGATAAGTATGACCTAAACCGGAAACAGCTCCTCTGTTGTTGTTCTACACAG	259
QY	181	GGCACCAGGAGACCCACCGACACAGCCGCAAGTTTGTAAAGGAAATACAGAACCAACA	240
DB	260	GGCACCAGGAGACCCACCGACACAGCCGCAAGTTTGTAAAGGAAATACAGAACCAACA	319
QY	241	CTGCCGGTGTATTTCTGTTGCTACCTGCGGTATGCGGTACTGCGGTGATTTCAGAA	300
DB	320	CTGCCGGTGTATTTCTGTTGCTACCTGCGGTATGCGGTACTGCGGTGATTTCAGAA	379
QY	301	TACACCTACTTTTGCAATGGGGGGAAGATTAATGTATAAGCATTCAGAGCTTGAGCC	360
DB	380	TACACCTACTTTTGCAATGGGGGGAAGATTAATGTATAAGCATTCAGAGCTTGAGCC	439
QY	361	CGGCATTTCTATGACACTGGACATGACATGCTGTAGTTAGTTTGAACCTTGTGTTGAG	420
DB	440	CGGCATTTCTATGACACTGGACATGACATGCTGTAGTTAGTTTGAACCTTGTGTTGAG	499
QY	421	CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA	480
DB	500	CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA	559
QY	481	GAGGAGATAAGTGGCCGACCTCCCGTGGGATCACTGCTGATCCTTGAGGACAGACCTTGTG	540
DB	560	GAGGAGATAAGTGGCCGACCTCCCGTGGGATCACTGCTGATCCTTGAGGACAGACCTTGTG	619
QY	541	AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTGCGATGATTCAGGA	600
DB	620	AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTGCGATGATTCAGGA	679
QY	601	AGAAAGGATTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGA	660
DB	680	AGAAAGGATTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGA	739
QY	661	ATTGAAGACTTTGAGTCTCACTTACCGTTGGTACCCCACTCTCAAGCCTCTCTG	720
DB	740	ATTGAAGACTTTGAGTCTCACTTACCGTTGGTACCCCACTCTCAAGCCTCTCTG	799
QY	721	AATATTCTGTTTACCCCAAGATTTTACAGGTACATCTGACAGAGTCTCTTGGCCAG	780
DB	800	AATATTCTGTTTACCCCAAGATTTTACAGGTACATCTGACAGAGTCTCTTGGCCAG	859

QY	781	GAGGAAAGCCAAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCTCAATTTCAAAG	840
DB	860	GAGGAAAGCCAAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCTCAATTTCAAAG	919
QY	841	GCAGTTTCACTTACTAGGAATGATGCCATAAAACCACTCTGCTGTAGATTTGGACATT	900
DB	920	GCAGTTTCACTTACTAGGAATGATGCCATAAAACCACTCTGCTGTAGATTTGGACATT	979
QY	901	TCAAAATACAGACTTTTCTCTATCAGCCTGGAGATGCTTCCAGGCTGATCTGCCCTTAACAGT	960
DB	980	TCAAAATACAGACTTTTCTCTATCAGCCTGGAGATGCTTCCAGGCTGATCTGCCCTTAACAGT	1039
QY	961	GATTTGAGGTAACAAAGCCTACTTCAAAGACTGAGCTTGAAGATAAAAGAGAGCACTGC	1020
DB	1040	GATTTGAGGTAACAAAGCCTACTTCAAAGACTGAGCTTGAAGATAAAAGAGAGCACTGC	1099
QY	1021	GTCCCTTTTGAATAAAGGACAGACAAAGAGAGAGGAGCTACCTTACCCAGCATATA	1080
DB	1100	GTCCCTTTTGAATAAAGGACAGACAAAGAGAGAGGAGCTACCTTACCCAGCATATA	1159
QY	1081	CCTGCGGAGTGTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT	1140
DB	1160	CCTGCGGAGTGTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT	1219
QY	1141	AAAAAGGCAATTTTTCGAGCCTTGTGACTATACAGTGAAGTCTGAAAGCGCAGG	1200
DB	1220	AAAAAGGCAATTTTTCGAGCCTTGTGACTATACAGTGAAGTCTGAAAGCGCAGG	1279
QY	1201	CTACAGGAGCTGTGCAAGTAACAAAGGGGAGCGGATATAGCGCTTGTGACAGATGCC	1260
DB	1280	CTACAGGAGCTGTGCAAGTAACAAAGGGGAGCGGATATAGCGCTTGTGACAGATGCC	1339
QY	1261	TGTGCTGCTGTGTGATCTCTCTGCTTTCCTTCTGCTTTCCTTTCGAGCAGCACTCAGTCTC	1320
DB	1340	TGTGCTGCTGTGTGATCTCTCTGCTTTCCTTCTGCTTTCCTTTCGAGCAGCACTCAGTCTC	1399
QY	1321	CTGCTCGAATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA	1380
DB	1400	CTGCTCGAATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA	1459
QY	1381	TTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGGAATTTCTGTCTACTGCCACA	1440
DB	1460	TTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGGAATTTCTGTCTACTGCCACA	1519
QY	1441	ACAGAGGTTCTCGGAAGGGAGTATGTACAGGCTGCTGCTGCTTGTGCTGCTTCCAGTT	1500
DB	1520	ACAGAGGTTCTCGGAAGGGAGTATGTACAGGCTGCTGCTGCTTGTGCTGCTTCCAGTT	1579
QY	1501	CTTCAGCCAAACATACATGCCATCCATGAAGACAGCGGAAAGCCCTGGCTCTTAAGATA	1560
DB	1580	CTTCAGCCAAACATACATGCCATCCATGAAGACAGCGGAAAGCCCTGGCTCTTAAGATA	1639
QY	1561	TCATCTCTCTCGAACAACAAATTTCTTCACTTACAGATGACCCCTCAATCCCCATC	1620
DB	1640	TCATCTCTCTCGAACAACAAATTTCTTCACTTACAGATGACCCCTCAATCCCCATC	1699
QY	1621	ATAATGTTGGTCCAGGAACCGGCATAGCCCTTTTATTTGGGTTCTTCAACATAGAGAG	1680
DB	1700	ATAATGTTGGTCCAGGAACCGGCATAGCCCTTTTATTTGGGTTCTTCAACATAGAGAG	1759
QY	1681	AAATCCCAAGAACACACACCCAGATGGAATTTTGGAGCAATTTGTTGTTTTTGGCTGC	1740
DB	1760	AAATCCCAAGAACACACACCCAGATGGAATTTTGGAGCAATTTGTTGTTTTTGGCTGC	1819
QY	1741	AGGCATAAGGATAGGATTTATCTATTAGAAAGAGCTCAGACATTTCTTAAAGCATGGG	1800
DB	1820	AGGCATAAGGATAGGATTTATCTATTAGAAAGAGCTCAGACATTTCTTAAAGCATGGG	1879
QY	1801	ATCTTAACTCACTAAAGGTTTCTTCTCAGAGATGCTCTGTTGGGAGGAGAGAGCC	1860
DB	1880	ATCTTAACTCACTAAAGGTTTCTTCTCAGAGATGCTCTGTTGGGAGGAGAGAGCC	1939
QY	1861	CCAGCAAGTATGTACAAAGCAACATCCAGCTTTCATGGCCAGAGGTGGCGAGATTCCTC	1920

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Db      1940  CCAGCAAGATGATGTACAAGAACACATCCAGCTTCATGCCAGCAGGTGGCGAGAATCCTC 1999
Qy      1921  CTCAGGAGAAACGGCCATATTTATGTGTGTGGAGATCAAAAGAAATATGGCCAAGGATGTA 1980
Db      2000  CTCAGGAGAAACGGCCATATTTATGTGTGTGGAGATCAAAAGAAATATGGCCAAGGATGTA 2059
Qy      1981  CATGATGCCCTTGTGCATAATAAAGCAAAAGAGGTGGAGTTGAAAAAAGCTAGAACCAATG 2040
Db      2060  CATGATGCCCTTGTGCATAATAAAGCAAAAGAGGTGGAGTTGAAAAAAGCTAGAACCAATG 2119
Qy      2041  AAAACCCCTGGCCACTTTAAAAAGAAAGAAAAAGCTACCTTCAGGATATTTGGTCATAA 2097
Db      2120  AAAACCCCTGGCCACTTTAAAAAGAAAGAAAAAGCTACCTTCAGGATATTTGGTCATAA 2176

RESULT 8
US-09-371-347-43
; Sequence 43, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: ROY A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 43
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-43

```

[illegible]

Db	1501	CTTCAGGCAAAACATACATGCATCCATGAAGACAGCGGGAAGCCCTGGCTCTCTAAGATA	1560
Qy	1561	TCCATCTCTCTCGAAACAAATTTCTTCCACCTTACAGATGACCCCTCAATCCCCATC	1620
Db	1561	TCCATCTCTCTCGAACAAATTTCTTCCACCTTACAGATGACCCCTCAATCCCCATC	1620
Qy	1621	ATAATGTGGGTCCAGGAAACCGGATAGCCCCGTTTATTTGGTTCCTTACCAATAGAGAG	1680
Db	1621	ATAATGTGGGTCCAGGAAACCGGATAGCCCCGTTTATTTGGTTCCTTACCAATAGAGAG	1680
Qy	1681	AAACTCCAAGAACCAACCCAGATGGAATTTTGGAGCAATGTGGTTGTTTGGCTGC	1740
Db	1681	AAACTCCAAGAACCAACCCAGATGGAATTTTGGAGCAATGTGGTTGTTTGGCTGC	1740
Qy	1741	AGGATAAGGATAGGGATTATCTATTTCAGAAAGAGCTCAGACATTTCCCTTAAGCATGGG	1800
Db	1741	AGGATAAGGATAGGGATTATCTATTTCAGAAAGAGCTCAGACATTTCCCTTAAGCATGGG	1800
Qy	1801	ATCTTAATCATCTAAAGGTTTCCTTCTCAAGAGATGCTCTGTGGGAGGAGGAGCC	1860
Db	1801	ATCTTAATCATCTAAAGGTTTCCTTCTCAAGAGATGCTCTGTGGGAGGAGGAGCC	1860
Qy	1861	CCAGCAAGTATGTACAGCAACATCCAGTTCATGCCAGCAGGTGGCGAGATCCTC	1920
Db	1861	CCAGCAAGTATGTACAGCAACATCCAGTTCATGCCAGCAGGTGGCGAGATCCTC	1920
Qy	1921	CTCCAGGAGAACGCCATATTTATGTGTGGAGATCAAAAGATATGGCCAGGATGTA	1980
Db	1921	CTCCAGGAGAACGCCATATTTATGTGTGGAGATCAAAAGATATGGCCAGGATGTA	1980
Qy	1981	CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTCGAGTTGAAAACTAGAACCAATG	2040
Db	1981	CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTCGAGTTGAAAACTAGAACCAATG	2040
Qy	2041	AAAACCTGGCCACTTTAAAGAAGAAACCGTACCTCAGGATATTTGGTCATAA	2097
Db	2041	AAAACCTGGCCACTTTAAAGAAGAAACCGTACCTCAGGATATTTGGTCATAA	2097
RESULT 9			
US-11-119-096-43			
; Sequence 43, Application US/11119096			
; Publication No. US20050191701A1			
; GENERAL INFORMATION:			
; APPLICANT: Gravel, Roy A,			
; APPLICANT: Rozen, Rima			
; APPLICANT: Leclerc, Daniel			
; APPLICANT: Wilson, Aaron			
; APPLICANT: Rosenblatt, David			
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:			
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE			
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME			
; FILE REFERENCE: 50004/003005			
; CURRENT APPLICATION NUMBER: US/11/119,096			
; CURRENT FILING DATE: 2005-04-29			
; PRIOR APPLICATION NUMBER: 09/487,841			
; PRIOR FILING DATE: 2000-01-19			
; PRIOR APPLICATION NUMBER: 09/371,347			
; PRIOR FILING DATE: 1999-08-10			
; PRIOR APPLICATION NUMBER: 09/232,028			
; PRIOR FILING DATE: 1999-01-15			
; PRIOR APPLICATION NUMBER: 60/071,622			
; PRIOR FILING DATE: 1998-01-16			
; NUMBER OF SEQ ID NOS: 63			
; SOFTWARE: FastSeq for Windows Version 4.0			
; SEQ ID NO 43			
; LENGTH: 2097			
; TYPE: DNA			
; ORGANISM: Homo sapiens			
US-11-119-096-43			
Query Match 99.8%; Score 2093.8; DB 26; Length 2097;			
Best Local Similarity 99.9%; Pred. No. 0;			

1081 CCTGGGGATGTTCTCTCCAGTTCAATTTTACTGTGTCTTGAATCCGAGCAATTCCT 1140
1081 CCTGGGGATGTTCTCTCCAGTTCAATTTTACTGTGTCTTGAATCCGAGCAATTCCT 1140
1141 AAAAAGGCATTTTGGAGCCCTTGGAGCTATACCAAGTGCAGTGTCTGAAAAGCGCAGG 1200
1141 AAAAAGGCATTTTGGAGCCCTTGGAGCTATACCAAGTGCAGTGTCTGAAAAGCGCAGG 1200
1201 CTACAGGAGCTGTGAGTAAACAAGGGGAGCGGATATAGCGCTTTGTACAGATGCC 1260
1201 CTACAGGAGCTGTGAGTAAACAAGGGGAGCGGATATAGCGCTTTGTACAGATGCC 1260
1261 TGTGCTGCTGTGTGATCT 1320
1261 TGTGCTGCTGTGTGATCT 1320
1321 CTGCTCGAATCT 1380
1321 CTGCTCGAATCT 1380
1381 TTTCACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCA 1440
1381 TTTCACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCA 1440
1441 ACAGAGGTTCTGGGAAGGAGTATGTACAGGCTGGCTTGTGTTGTTGTTGTTGTTGTT 1500
1441 ACAGAGGTTCTGGGAAGGAGTATGTACAGGCTGGCTTGTGTTGTTGTTGTTGTTGTT 1500
1501 CTTTACCCAAACATCATGATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1560
1501 CTTTACCCAAACATCATGATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1560
1561 TCCATCTCTCTCTCGAACAACAAATTTCTTCCATTTACAGATGACCCCTCAATCCCCTC 1620
1561 TCCATCTCTCTCTCGAACAACAAATTTCTTCCATTTACAGATGACCCCTCAATCCCCTC 1620
1621 ATAAATGGTGGTCCAGAACCCGATAGCCCGTTTATTTGGGTCTCTCAACATAGAGAG 1680
1621 ATAAATGGTGGTCCAGAACCCGATAGCCCGTTTATTTGGGTCTCTCAACATAGAGAG 1680
1681 AAACCTCAAAGAACCAACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGTGCTGC 1740
1681 AAACCTCAAAGAACCAACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGTGCTGC 1740
1741 AGGCATAAGGATAGGATATCTATTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
1741 AGGCATAAGGATAGGATATCTATTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
1801 ATCTTAACCTCAATCAAGGTTTCTCTCAAGAGATGCTCTCTTGGGGAGGAGGCC 1860
1801 ATCTTAACCTCAATCAAGGTTTCTCTCAAGAGATGCTCTCTTGGGGAGGAGGCC 1860
1861 CCAGCAAAAGTATGTACAAGAACATCCAGCTTCTATGGCCAGCAGGTGGCGAGATCCTC 1920
1861 CCAGCAAAAGTATGTACAAGAACATCCAGCTTCTATGGCCAGCAGGTGGCGAGATCCTC 1920
1921 CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAAAGAAATATGCGCAAGGATGA 1980
1921 CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAAAGAAATATGCGCAAGGATGA 1980
1981 CATGATGCCCTTGTGCAATATATAGCAAGAGTTGGATTTGAAAACCTAGAACATG 2040
1981 CATGATGCCCTTGTGCAATATATAGCAAGAGTTGGATTTGAAAACCTAGAACATG 2040
2041 AAAACCTTGGCCACTTTAAAGAAAGAAACGCTACCTTCAGGATATTTGGTCATAA 2097
2041 AAAACCTTGGCCACTTTAAAGAAAGAAACGCTACCTTCAGGATATTTGGTCATAA 2097

Publication No. US20050026169A1
GENERAL INFORMATION:
APPLICANT: CARGILL, Michele et al.
TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001499
CURRENT APPLICATION NUMBER: US/10/741,600
CURRENT FILING DATE: 2003-12-22
NUMBER OF SEQ ID NOS: 73997
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 692
LENGTH: 3256
TYPE: DNA
ORGANISM: Homo sapiens
US-10-741-600-692
Query Match 99.6%; Score 2088.6; DB 22; Length 3256;
Best Local Similarity 99.0%; Pred. No. 0;
Matches 2076; Conservative 21; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGAGAGGTTTCTGTTACTATATCTACAGAGGAGCAGGCAAGGCCATCCGAA 60
DB 94 ATGAGAGGTTTCTGTTACTATATCTACAGAGGAGCAGGCAAGGCCATCCGAA 153
QY 61 GAAATATGTAGCAAGCTGTGTACATGGATTTCTGCAGATCTTCACTGTATTAGTGA 120
DB 154 GAAATGTGTAGCAAGCTGTGTACATGGATTTCTGCAGATCTTCACTGTATTAGTGA 213
QY 121 TCCGATAAGTATGACTTAAACCCGAAACAGCTCTCTTGTGTTGTTGTTGTTGTTGTT 180
DB 214 TCCGATAAGTATGACTTAAACCCGAAACAGCTCTCTTGTGTTGTTGTTGTTGTTGTT 273
QY 181 GGCACGGAGACCCACCCGACAGCAGCCGCAAGTTTGTAAAGAAATACAGAACCA 240
DB 274 GGCACGGAGACCCACCCGACAGCAGCCGCAAGTTTGTAAAGAAATACAGAACCA 333
QY 241 CTGCGGTTGATTTCTTCTCACCCTGGGTATGGTTACTGGGTCTCGGTGATTCAGAA 300
DB 334 CTGCGGTTGATTTCTTCTCACCCTGGGTATGGTTACTGGGTCTCGGTGATTCAGAA 393
QY 301 TACACCTACTTTTGAATGGGGGAGATAATTTGATAACCGACTTCAAGAGCTTGAGCC 360
DB 394 TACACCTACTTTTGAATGGGGGAGATAATTTGATAACCGACTTCAAGAGCTTGAGCC 453
QY 361 CGGCATTTCTATGACACTGGACATGCAGATGACTGTAGTTTGTAGAACTTGTGTTGAG 420
DB 454 CGGCATTTCTATGACACTGGACATGCAGATGACTGTAGTTTGTAGAACTTGTGTTGAG 513
QY 421 CCGTGGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTGTAGGTCAAGAGAGCA 480
DB 514 CCGTGGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTGTAGGTCAAGAGAGCA 573
QY 481 GAGGAGATAAGTGGCGACTCCCGTGGCATCACCTGTCATCTTGTAGGACAGACCTTGTG 540
DB 574 GAGGAGATAAGTGGCGACTCCCGTGGCATCACCTGTCATCTCTYAGGACAGACCTTGTG 633
QY 541 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAG 600
DB 634 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAG 693
QY 601 AGAAGGATTTCTGAGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCCAATGTTGA 660
DB 694 AGAAGGATTTCTGAGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCCAATGTTGA 753
QY 661 ATTGAAGACTTTTGAAGTCTCACTTACCCTGGTCCGTAACCCCACTCTCAAGCCTCTCTG 720
DB 754 ATTGAAGACTTTTGAAGTCTCACTTACCCTGGTCCGTAACCCCACTCTCAAGCCTCTCTG 813
QY 721 AATATTCCTGGTTTACCCCAAGAAATTTTACAGGTATCTCGAGAGTCTCTTGGCCAG 780
DB 814 AATATTCCTGGTTTACCCCAAGAAATTTTACAGGTATCTCGAGAGTCTCTTGGCCAG 873
QY 781 GAGGAAAGCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTCAGGTGCAATTTTCAAAG 840

Db 874 |||||GAGGAAAGCCAAAGTACTGTGACTTCAGCAGATCCAGTCTTTCAAGTGCCTTTCAAG 933
Qy 841 GCAGTTCAACTTACTACGAATGATGCATAAAAACCACTCTGCTGTGTAGAAATGGACATT 900
Db 934 GCAGTTCAACTTACTACGAATGATGCATAAAAACCACTCTGCTGTGTAGAAATGGACATT 993
Qy 901 TCAATACAGACTTTTCTCAGCTTGAGATGCTTTCAGCGTGTATCTGCCCTAACAGT 960
Db 994 TCAATACAGACTTTTCTCAGCTTGAGATGCTTTCAGCGTGTATCTGCCCTAACAGT 1053
Qy 961 GATCTGAGGTACAAAGCCCTACTCCAAAGACTGCGAGTGTGAAGATAAAGAGAGCACTGC 1020
Db 1054 GATCTGAGGTACAAAGCCCTACTCCAAAGACTGCGAGTGTGAAGATAAAGAGAGCACTGC 1113
Qy 1021 GTCCCTTTGAAATAAAGGAGCAGACACAAAGAGAGAGCTACCTTACCCTCCAGCATATA 1080
Db 1114 GTCCCTTTGAAATAAAGGAGCAGACACAAAGAGAGAGCTACCTTACCCTCCAGCATATA 1173
Qy 1081 CTGCGGAGTGTCTCTCAGTTTCATTTTACCTGCTGTCTTGAATCCGAGCAATTCCT 1140
Db 1174 CTGCGGAGTGTCTCTCAGTTTCATTTTACCTGCTGTCTTGAATCCGAGCAATTCCT 1233
Qy 1141 AAAAGGCATTTTTCGAGCCCTTGTGGACTATACCACTGACAGTCTGCTGAAAAGCCGAG 1200
Db 1234 AAAAGGCATTTTTCGAGCCCTTGTGGACTATACCACTGACAGTCTGCTGAAAAGCCGAG 1293
Qy 1201 CTACAGAGCTGTGCAAGTAAACAAAGGCGAGCGATTATAGCCGCTTGTACGAGATGCC 1260
Db 1294 CTACAGAGCTGTGCAAGTAAACAAAGGCGAGCGATTATAGCCGCTTGTACGAGATGCC 1353
Qy 1261 TGTGCTGCTGTGTGATCTCTCTCGCTTTCCCTTTTCCCTTTCCCTTTCCCTTTCCCTTT 1320
Db 1354 TGTGCTGCTGTGTGATCTCTCTCGCTTTCCCTTTTCCCTTTCCCTTTCCCTTTCCCTTT 1413
Qy 1321 CTGCTCGAATCTTCTCTAACTTCAACCCAGACGATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1414 CTGCTCGAATCTTCTCTAACTTCAACCCAGACGATATTCGTGTGCAAGCTCAAGTTTA 1473
Qy 1381 TTTTACCAGGAAGCTCCATTTTGTCTTCAACATTTGGAATTTCTGTCTACTGCGACA 1440
Db 1474 TTTTACCAGGAAGCTCCATTTTGTCTTCAACATTTGGAATTTCTGTCTACTGCGACA 1533
Qy 1441 ACAGAGTTCTGCGGAAGGAGTATGTACAGGCTGCGCTTGTGTTGTTGTTGTTGTTGTT 1500
Db 1534 ACAGAGTTCTGCGGAAGGAGTATGTACAGGCTGCGCTTGTGTTGTTGTTGTTGTTGTT 1593
Qy 1501 CTTTACGCCAAA CATATGATCCCATGAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1560
Db 1594 CTTTACGCCAAA CATATGATCCCATGAGACAGYGGGGAAGCCCTGGCTCTTAAGATA 1653
Qy 1561 TCCATCTCTCGAACAACAATTTCTTCCACTTACAGATGACCCCTCAATCCCCATC 1620
Db 1654 TCCATCTCTCGAACAACAATTTCTTCCACTTACAGATGACCCCTCAATCCCCATC 1713
Qy 1621 ATAATGGTGGTCCAGGAACCGGATAGCCCTTTTATTTGGTTCCTACAAATAGAGAG 1680
Db 1714 ATAATGGTGGTCCAGGAACCGGATAGCCCTTTTATTTGGTTCCTACAAATAGAGAG 1773
Qy 1681 AAATCCAAAGAAACAACCCAGATGAAATTTTGGAGCAATGTGTTGTTTGTGCTGC 1740
Db 1774 AAATCCAAAGAAACAACCCAGATGAAATTTTGGAGCAATGTGTTGTTTGTGCTGC 1833
Qy 1741 AGGCATAAGGATAGGATTTATCTTTCAGAAAGAGCTCAGACATTTCTTAAGCATGG 1800
Db 1834 AGGCATAAGGATAGGATTTATCTTTCAGAAAGAGCTCAGAYATTTCTTAAGCATGG 1893
Qy 1801 ATCTTAACCTCATCTAAAGGTTTCTCTCAAGAGATGCTCCTGTGGGAGGAGGAGCC 1860
Db 1894 ATCTTAACCTCATCTAAAGGTTTCTCTCAAGAGATGCTCCTGTGGGAGGAGGAGCC 1953
Qy 1861 CCAGCAAGGTATGTACAAGACAAATCCAGCTTTCATGGCCAGCAGGTGGCGAAGATCCTC 1920

Db 1954 CCAGCAAGTATGTTCACAGCAACATCCAGCTTCATGGCCAGCAGGTGCGRAGAATCCTC 2013
Qy 1921 CTCACGAGAACCGGCATATTTATGTGTGTGAGATGCAAAAGATATGGCCAGGATGTA 1980
Db 2014 CTCACGAGAACCGGCATATTTATGTGTGTGAGATGCAAAAGATATGGCCAGGATGTA 2073
Qy 1981 CATGATGCCCTTGTGCAATTAATAAGCAAAAGAGTTGGAGTTGAAAACTAGAACATG 2040
Db 2074 CATGATGCCCTTGTGCAATTAATAAGCAAAAGAGTTGGAGTTGAAAACTAGAACATG 2133
Qy 2041 AAAACCCCTGGCCACTTTAAAGAAAGAAACCCCTACCTTCAGATATTTGGTCATAA 2097
Db 2134 AAAACCCCTGGCCACTTTAAAGAAAGAAACCCCTACCTTCAGATATTTGGTCATAA 2190

RESULT 11
US-10-741-600-693
; Sequence 693, Application US/10741600
; Publication No. US20050026169A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001499
; CURRENT APPLICATION NUMBER: US/10/741,600
; NUMBER OF SEQ ID NOS: 73997
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 693
; LENGTH: 3274
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-741-600-693

Query Match 99.6%; Score 2088.6; DB 22; Length 3274;
Best Local Similarity 99.0%; Pred. No. 0;
Matches 2076; Conservative 21; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGAGGAGGTTTCTGTACTATATGCTACACAGCAGGACAGCAAGCCCAATCGCAGAA 60
Db 112 ATGAGGAGGTTTCTGTACTATATGCTACACAGCAGGACAGCAAGCCCAATCGCAGAA 171
Qy 61 GAAATATGTAGCAAGCTGTGTATCATGGATTTCTGAGATCTTCATCTGTATTAGTGAA 120
Db 172 GAAATATGTAGCAAGCTGTGTATCATGGATTTCTGAGATCTTCATCTGTATTAGTGAA 231
Qy 121 TCCGATTAAGTATGACCTAAACCCAGAACAGCTCTCTGTTGTTGTTGTTCTACCCAG 180
Db 232 TCCGATTAAGTATGACCTAAACCCAGAACAGCTCTCTGTTGTTGTTGTTCTACCCAG 291
Qy 181 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 292 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 351
Qy 241 CTGCCGTTGATTTCTTTGCTCACCTGGGTATGGGTACTCGGTCTCGGTGATTGAGAA 300
Db 352 CTGCCGTTGATTTCTTTGCTCACCTGGGTATGGGTACTCGGTCTCGGTGATTGAGAA 411
Qy 301 TACACCTACTTTTGCATGGGGGAGATTAATTGATAACGACTTCAAGAGCTTGAGCC 360
Db 412 TACACCTACTTTTGCATGGGGGAGATTAATTGATAACGACTTCAAGAGCTTGAGCC 471
Qy 361 CGGCATTTCTATGACACTGACATGATGATAGTTAGAGTTTAGAATCTTGGTTGAG 420
Db 472 CGGCATTTCTATGACACTGACATGATGATAGTTAGAGTTTAGAATCTTGGTTGAG 531
Qy 421 CGGTGATTTGCTGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGGTCAAGCAGAGACAA 480
Db 532 CGGTGATTTGCTGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGGTCAAGCAGAGACAA 591
Qy 481 GAGGAGATTAAGTGGGCACTCCCGTGGCATCACCTGCGATCTTGGAGCAGACCTTGTG 540
Db 592 GAGGAGATTAAGTGGGCACTCCCGTGGCATCACCTGCGATCTTGGAGCAGACCTTGTG 651

QY 541 AAGTCAGAGCTGCTACACATTGGAATCTCAAGTCGAGCTTCTGAGATTTCGATGATTCAGGA 600
DB 652 AAGTCAGAGCTGCTACACATTGGAATCTCAAGTCGAGCTTCTGAGATTTCGATGATTCAGGA 711
QY 601 AGAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGA 660
DB 712 AGAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGA 771
QY 661 ATTGAAGACTTTGAGTCCTCACTTACCCTGTTGGTACCCCACTCTCAAGCCTCTCTG 720
DB 772 ATTGAAGACTTTGAGTCCTCACTTACCCTGTTGGTACCCCACTCTCAAGCCTCTCTG 831
QY 721 AATATTCTCTGTTTACCCCAAGAAATTTACAGGTACATCTCGAGGATCTCTTGCCAG 780
DB 832 AATATTCTCTGTTTACCCCAAGAAATTTACAGGTACATCTCGAGGATCTCTTGCCAG 891
QY 781 GAGGAAAGCCAAATGATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG 840
DB 892 GAGGAAAGCCAAATGATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTTCAAAG 951
QY 841 GCAGTTCAACTACTACGAATGATGCCATAAAACCACTCTGCTGGTGAATTTGGACATT 900
DB 952 GCAGTTCAACTACTACGAATGATGCCATAAAACCACTCTGCTGGTGAATTTGGACATT 1011
QY 901 TCAATACAGACTTTTCTCTATCAGCTGAGATGCCCTTCAAGTGTATCTGCCCTACAGT 960
DB 1012 TCAATACAGACTTTTCTCTATCAGCTGAGATGCCCTTCAAGTGTATCTGCCCTACAGT 1071
QY 961 GATTTCTGAGGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAGAGAGCACTGC 1020
DB 1072 GATTTCTGAGGTACAAAGCCTACTCCAAAGACTGCAGSTTGAAGATAAAGAGAGCACTGC 1131
QY 1021 GTCTTTTGAATAAAGGCAGACACAAGAGAAAGGAGCTACCTTACCCTACAGCATATA 1080
DB 1132 GTCTTTTGAATAAAGGCAGACACAAGAGAAAGGAGCTACCTTACCCTACAGCATATA 1191
QY 1081 CTTGCGGGATGTTCTCTCCAGTTCAATTTTACCTGGTCTTGAATCCGAGCAATTCCT 1140
DB 1192 CTTGCGGGATGTTCTCTCCAGTTCAATTTTACCTGGTCTTGAATCCGAGCAATTCCT 1251
QY 1141 AAAAGGCAATTTTGGAGCCCTTGTGGACTATACAGAGTACAGTCTGTAAGAGCGCAG 1200
DB 1252 AAAAGGCAATTTTGGAGCCCTTGTGGACTATACAGAGTACAGTCTGTAAGAGCGCAG 1311
QY 1201 CTACAGAGCTGTGAGTAAACAAGGGGACGCGATATAGCCGCTTTGTACAGATGCC 1260
DB 1312 CTACAGAGCTGTGAGTAAACAAGGGGACGCGATATAGCYGCTTTGTACAGATGCC 1371
QY 1261 TGTGCTGCTGTTGGATCTCTCTGCTTCCCTTTCTGCGAGCCACCACTCAGTCTC 1320
DB 1372 TGTGCTGCTGTTGGATCTCTCTGCTTCCCTTTCTGCGAGCCACCACTCAGTCTC 1431
QY 1321 CTGCTCGAATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
DB 1432 CTGCTCGAATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1491
QY 1381 TTTACCCAGGAAGCTCCATTTGTCTTCAACATTTGTGGAATTTCTGTACTGCAACA 1440
DB 1492 TTTACCCAGGAAGCTCCATTTGTCTTCAACATTTGTGGAATTTCTGTACTGCAACA 1551
QY 1441 ACAGAGTTCTGCGAAGGAGTATGTACAGGCTGCTGCTTGTGTTGTTGCTCAGTT 1500
DB 1552 ACAGAGTTCTGCGAAGGAGTATGTACAGGCTGCTGCTTGTGTTGTTGCTCAGTT 1611
QY 1501 CTTTACGCAAAATACATGATCCCATGAAAGAGAGGAGGAGCCCTGCTCTTAAGATA 1560
DB 1612 CTTTACGCAAAATACATGATCCCATGAAAGAGAGGAGGAGCCCTGCTCTTAAGATA 1671
QY 1561 TCCATCTCTCTCGAACAACAAATTTCTTCCATTTACAGATGAGCCCTCAATCCCAATC 1620
DB 1672 TCCATCTCTCTCGAACAACAAATTTCTTCCATTTACAGATGAGCCCTCAATCCCAATC 1731

QY 1621 ATAATGGTGGTCCAGGAACCGGCATAGCCCGTTTATTTGGTTCCTCAACAATAGAGAG 1680
DB 1732 ATAATGGTGGTCCAGGAACCGGCATAGCCCGTTTATTTGGTTCCTCAACAATAGAGAG 1791
QY 1681 AAATCTCAAGAACCAACACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1740
DB 1792 AAATCTCAAGAACCAACACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1851
QY 1741 AGGCATAGGATAGGATTTCTATTCAGAAAGAGCTCAGACATTTCTTTAAGCATGG 1800
DB 1852 AGGCATAGGATAGGATTTCTATTCAGAAAGAGCTCAGAYATTTCTTTAAGCATGG 1911
QY 1801 ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1860
DB 1912 ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1971
QY 1861 CCAGCAAAAGTATGTCAAGAACCAATCCAGCTTTCATGGCCAGCAGGTGGCGAATCTCTC 1920
DB 1972 CCAGCAAAAGTATGTCAAGAACCAATCCAGCTTTCATGGCCAGCAGGTGGCGAATCTCTC 2031
QY 1921 CTCCAGGAGAACGGCCATATTTATGTGTGAGATGCAAGAAATATGCCCAGGATGTA 1980
DB 2032 CTCCAGGAGAACGGCCATATTTATGTGTGAGATGCAAGAAATATGCCCAGGATGTA 2091
QY 1981 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTTGAAGTTGAAAGAACTAGAACCAATG 2040
DB 2092 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTTGAAGTTGAAAGAACTAGAACCAATG 2151
QY 2041 AAAACCCCTGGCCACTTTTAAAGAAAGAAACCGTACCTTCCAGATATTTGGTCATAA 2097
DB 2152 AAAACCCCTGGCCACTTTTAAAGAAAGAAACCGTACCTTCCAGATATTTGGTCATAA 2208

RESULT 12

US-09-371-347-45
; Sequence 45, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 45
; LENGTH: 2094
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-45

Query Match 99.2%; Score 2079.4; DB 10; Length 2094;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 1; Indels 3; Gaps 1;

QY 1 ATGAGGAGGTTTCTGTTACTATATGCTACACAGCGGACAGCAAGGCCATCGCAGAA 60
DB 1 ATGAGGAGGTTTCTGTTACTATATGCTACACAGCGGACAGCAAGGCCATCGCAGAA 60
QY 61 GAAATATGTGAGCAAGCTGTGGTACATGATTTTCTGCAGATCTTCACTGTATTAGTAA 120
DB 61 GAAATGTGTGAGCAAGCTGTGGTACATGATTTTCTGCAGATCTTCACTGTATTAGTAA 120
QY 121 TCCGATAAGTATGACCTTAAACCCGAAACAGCTCTCTTGTGTTGTTGTTTCTACACG 180
DB 121 TCCGATAAGTATGACCTTAAACCCGAAACAGCTCTCTTGTGTTGTTGTTTCTACACG 180

181 QY GGCACCGGAGACCCACCCGACACAGCCCGCAAGTGTGTTAAGGAATATACAGAACCAACA 240
181 Db GGCACCGGAGACCCACCCGACACAGCCCGCAAGTGTGTTAAGGAATATACAGAACCAACA 240
241 QY CTGCCGTTGATTTCTTTGCTCACTGCGGTATGCGGTACTGCGTCTCGGTGATTCAGAA 300
241 Db CTGCCGTTGATTTCTTTGCTCACTGCGGTATGCGGTACTGCGTCTCGGTGATTCAGAA 300
301 QY TACACCTACTTTTGCATGCGGGAAGATTAATTTGATAAAGCACTTCAAGAGCTTGGAGCC 360
301 Db TACACCTACTTTTGCATGCGGGAAGATTAATTTGATAAAGCACTTCAAGAGCTTGGAGCC 360
361 QY CGSCATTTCTATCAGACATGACATGACATGCTGTAGTTTGAACCTTGTGGTTGAG 420
361 Db CGSCATTTCTATGACACTGGACATGACATGCTGTAGTTTGAACCTTGTGGTTGAG 420
421 QY CCGTGATTTGCTGCACTTCGGCCAGCCCTCAGAAAGCATTTTAGTTAGGTCAAGCAGGACAA 480
421 Db CCGTGATTTGCTGCACTTCGGCCAGCCCTCAGAAAGCATTTTAGTTAGGTCAAGCAGGACAA 480
481 QY GAGGAGATTAAGTGGCGCACTCCCGGTGGCATCACTGCACTCTTGAGGACAGACCTTGTG 540
481 Db GAGGAGATTAAGTGGCGCACTCCCGGTGGCATCACTGCACTCTTGAGGACAGACCTTGTG 540
541 QY AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGATGATTCAGGA 600
541 Db AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGATGATTCAGGA 600
601 QY AGAAAGATTTCTCAGGTTTTGAAGCAAAATGCAAGCAACCAATCCAAATGTTGTA 660
601 Db AGAAAGATTTCTCAGGTTTTGAAGCAAAATGCAAGCAACCAATCCAAATGTTGTA 660
661 QY ATTGAAGACTTTGAGTCTCACTTACCCGTTCCGTTACCCCACTCTCACAAGCCTCTCTG 720
661 Db ATTGAAGACTTTGAGTCTCACTTACCCGTTCCGTTACCCCACTCTCACAAGCCTCTCTG 720
721 QY AATATTTCTGGTTTACCCCGAGAAATATTTACAGGTATATCTGAGAGTCTCTTGGCCAG 780
721 Db AATATTTCTGGTTTACCCCGAGAAATATTTACAGGTATATCTGAGAGTCTCTTGGCCAG 780
781 QY GAGGAAGCAACTATCTGACTTCAGCAGATCCAGTTTTTCAAGTGCCCAATTTCAAAG 840
781 Db GAGGAAGCAACTATCTGACTTCAGCAGATCCAGTTTTTCAAGTGCCCAATTTCAAAG 840
841 QY GCAGTTTCAACTTACTACGATGATGCAATAAAGCACTCTGCTGGTAGAATTTGGACAT 900
841 Db GCAGTTTCAACTTACTACGATGATGCAATAAAGCACTCTGCTGGTAGAATTTGGACAT 900
901 QY TCAATATACAGACTTTTCTATAGCTTGGAGATGCTTCAAGCTGATCTGCCCTAACAGT 960
901 Db TCAATATACAGACTTTTCTATAGCTTGGAGATGCTTCAAGCTGATCTGCCCTAACAGT 960
961 QY GATTTCTGAGGTACAAAGCCTTACTTCAAGACTGCACTTGAAGTAAAGAGAGCACTGC 1020
961 Db GATTTCTGAGGTACAAAGCCTTACTTCAAGACTGCACTTGAAGTAAAGAGAGCACTGC 1020
1021 QY GTCTTTTGAATAAAGGAGACACAAAGAGAAAGAGGACTACCTTACCCAGCATATA 1080
1021 Db GTCTTTTGAATAAAGGAGACACAAAGAGAAAGAGGACTACCTTACCCAGCATATA 1080
1081 QY CTGCGGGATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTGAAATCCGAGCAATTCCT 1140
1081 Db CTGCGGGATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTGAAATCCGAGCAATTCCT 1140
1141 QY AAAAGGCAATTTTGGAGCCCTTGGACTATACAGTGACAGTCTGAAAGCCGAGG 1200
1141 Db AAAAGGCAATTTTGGAGCCCTTGGACTATACAGTGACAGTCTGAAAGCCGAGG 1200
1201 QY CTACAGAGCTGTGCAAGTAAACAAAGGCGAGCGATTTATAGCCGCTTGTACAGATGCC 1260
1201 Db CTACAGAGCTGTGCAAGTAAACAAAGGCGAGCGATTTATAGCCGCTTGTACAGATGCC 1260
1261 QY TGTGCTGCTTGTGGATCTCTCTCGCTTTCCCTTTCTTGGCCAGCCCACTCAGTCTC 1320

1261 Db TGTGCTGCTTGTGGATCTCTCTCGCTTTCCCTTTTGGCAGCAACACTCAGTCTC 1320
1321 QY CTGCTCGAATCTTCTCTAAACTTCAACCCAGACCATATTTGCTGTCGAAGCTCAAGTTTA 1380
1321 Db CTGCTCGAATCTTCTCTAAACTTCAACCCAGACCATATTTGCTGTCGAAGCTCAAGTTTA 1380
1381 QY TTTTCAACCCAGGAAAGCTCCTTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
1381 Db TTTTCAACCCAGGAAAGCTCCTTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
1441 QY ACAGAGGTTCTCGGGAAGGAGTATGTACAGCTGCTGCTTGTGTTGCTTGTGTTT 1500
1441 Db ACAGAGGTTCTCGGGAAGGAGTATGTACAGCTGCTGCTTGTGTTGCTTGTGTTT 1500
1501 QY CTTTACGCCAAACATACATCATGATCCCATGAAGACAGCGGAAAGCCCTGGCTCTTAAGATA 1560
1501 Db CTTTACGCCAAACATACATCATGATCCCATGAAGACAGCGGAAAGCCCTGGCTCTTAAGATA 1560
1561 QY TCCATCTCTCTCGAACAACAAATTTTCCACTTACAGATGACCCCTCAATCCCAATC 1620
1561 Db TCCATCTCTCTCGAACAACAAATTTTCCACTTACAGATGACCCCTCAATCCCAATC 1620
1621 QY ATAAATGCTGGTCCAGGACCGCATAGCCCGTTTATTTGGGTTCTTCAACATAGAGAG 1680
1621 Db ATAAATGCTGGTCCAGGACCGCATAGCCCGTTTATTTGGGTTCTTCAACATAGAGAG 1680
1681 QY AAATCTCAAGAAACAAACACCCAGATGGAATTTTGGAGCAATGTTGTTTGGCTGC 1740
1681 Db AAATCTCAAGAAACAAACACCCAGATGGAATTTTGGAGCAATGTTGTTTGGCTGC 1740
1741 QY AGGCATAAGGATAGGATTTATCTTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
1738 Db AGGCATAAGGATAGGATTTATCTTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1797
1801 QY ATCTTAACCTCATTAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAGCC 1860
1798 Db ATCTTAACCTCATTAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAGCC 1857
1861 QY CCAGCAAAAGTATGTACAGCAACATCCAGCTTTCATGGCCAGCAGCTGGCGCAATCCTC 1920
1858 Db CCAGCAAAAGTATGTACAGCAACATCCAGCTTTCATGGCCAGCAGCTGGCGCAATCCTC 1917
1921 QY CTCCAGGAGAACCGGCATATTTATGTTGTTGAGATGCAAAAGATATGCGCAAGGATGA 1980
1918 Db CTCCAGGAGAACCGGCATATTTATGTTGTTGAGATGCAAAAGATATGCGCAAGGATGA 1977
1981 QY CATGATGCTTGTGCAATATTAAGCAAGGTTGGAGTTGAAATCTAGAACCAATG 2040
1978 Db CATGATGCTTGTGCAATATTAAGCAAGGTTGGAGTTGAAATCTAGAACCAATG 2037
2041 QY AAAACCTTGGCCACTTTTAAAGAAAGAAACCGTACCTTTCAGGATATTTGGTCAATA 2097
2038 Db AAAACCTTGGCCACTTTTAAAGAAAGAAACCGTACCTTTCAGGATATTTGGTCAATA 2094

RESULT 13

US-11-119-096-45

; Sequence 45, Application US/11119096

; Publication No. US20050191701A1

; GENERAL INFORMATION:

; APPLICANT: Rozen, Rima

; APPLICANT: Leclerc, Daniel

; APPLICANT: Wilson, Aaron

; APPLICANT: Rosenblatt, David

; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:

; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE

; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME

; FILE REFERENCE: 50004/003005

; CURRENT APPLICATION NUMBER: US/11/119,096

; CURRENT FILING DATE: 2005-04-29

; PRIOR APPLICATION NUMBER: 09/487,841

QY	1921	CTCCAGGAGAACGGCCCATATTTATGTGTGTGGAGATGCAAGAAATATGCGCCAAAGGATGTA	1980	QY	481	GAGGAGATAAGTGGCGCACTCCCGTGGCATCACTGCGATCCTTGAGGACAGACCTTGTG	540
Db	1918	CTCCAGGAGAACGGCCCATATTTATGTGTGTGGAGATGCAAGAAATATGCGCCAAAGGATGTA	1977	Db	481	GAGGAGATAAGTGGCGCACTCCCGTGGCATCACTGCGATCCTTGAGGACAGACCTTGTG	540
QY	1981	CATGATGCCCTTGTGCAATAATAAGCAAGAGGTTGGAGTTGCAAAACTAGAACCAATG	2040	QY	541	AACTCAGAGCTCTACATTTCAATCTCAAGTCGAGCTTCTGAGATTCCGATGATTCAGGA	600
Db	1978	CATGATGCCCTTGTGCAATAATAAGCAAGAGGTTGGAGTTGCAAAACTAGAACCAATG	2037	Db	541	AACTCAGAGCTCTACATTTCAATCTCAAGTCGAGCTTCTGAGATTCCGATGATTCAGGA	600
QY	2041	AAAAACCTGGCCCACTTTAAAGAAAGAAAACGCTACCTTCAGGATATTTGGTCATAA	2097	QY	601	AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGA	660
Db	2038	AAAAACCTGGCCCACTTTAAAGAAAGAAAACGCTACCTTCAGGATATTTGGTCATAA	2094	Db	601	AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGA	660
RESULT 14							
US-09-371-347-47							
; Sequence 47, Application US/09371347							
; Publication No. US20030082676A1							
; GENERAL INFORMATION:							
; APPLICANT: Roy A. Gravel et al.							
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:							
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE							
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER							
; FILE REFERENCE: 50004/003003							
; CURRENT APPLICATION NUMBER: US/09/371,347							
; CURRENT FILING DATE: 1999-08-10							
; PRIOR APPLICATION NUMBER: 60/071,622							
; PRIOR FILING DATE: 1998-01-16							
; PRIOR APPLICATION NUMBER: 09/232,028							
; PRIOR FILING DATE: 1999-01-15							
; NUMBER OF SEQ ID NOS: 51							
; SOFTWARE: FastSeq for Windows Version 4.0							
; SEQ ID NO 47							
; LENGTH: 2093							
; TYPE: DNA							
; ORGANISM: Homo sapiens							
US-09-371-347-47							
Query Match 99.1%; Score 2077.4; DB 10; Length 2093;							
Best Local Similarity 99.8%; Pred. No. 0;							
Matches 2092; Conservative 0; Mismatches 1; Indels 4; Gaps 1;							
QY	1	ATGAGAGGTTTCTGTACTATATGCTACACAGCGGACAGGCAAGGCCATCGCAGAA	60	QY	1081	CTGCGGGATGTTCTCCAGTTCAATTTTACTCTGGTGTCTGAAATCCGAGCAATTCCT	1140
Db	1	ATGAGAGGTTTCTGTACTATATGCTACACAGCGGACAGGCAAGGCCATCGCAGAA	60	Db	1081	CTGCGGGATGTTCTCCAGTTCAATTTTACTCTGGTGTCTGAAATCCGAGCAATTCCT	1140
QY	61	GAATATGTGACCAAGCTGTGGTACATGATTTCTGCGAGATCTTCACTGTATTAGTGAA	120	QY	1141	AAAAAGGCATTTTTCGAGCCCTTGTGAGCTATACAGTGCAGATGCTGAAAAGCCGAG	1200
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QY	121	TCCGATAAGTATGACCTAAAAACCGAAACAGCTCTCTTGTGTGTGGTTTCTACCAAG	180	QY	1201	CTACAGGAGCTGTGAGTAAACAAGGGGCGAGGATTAAGCCGCTTTGTACGAGATGCC	1260
Db	121	TCCGATAAGTATGACCTAAAAACCGAAACAGCTCTCTTGTGTGTGGTTTCTACCAAG	180	Db	1201	CTACAGGAGCTGTGAGTAAACAAGGGGCGAGGATTAAGCCGCTTTGTACGAGATGCC	1260
QY	181	GGCACCGGAGACCCACCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA	240	QY	1261	TGTGCTGCTGTTGGATCTCTCTCGCTTTCCCTTCTGCGAGCCACCATCTCAGTCTC	1320
Db	181	GGCACCGGAGACCCACCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA	240	Db	1261	TGTGCTGCTGTTGGATCTCTCTCGCTTTCCCTTCTGCGAGCCACCATCTCAGTCTC	1320
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Db	241	CTGCGGTTGATTTCTTGTCTACCTCGCGTATGGGTACTGGTCTCGGTGATTCAGAA	300	Db	1321	CTGCTCGAACAATCTTCTTAAACTTCAACCAGACCATATTTCTGTGTCAGAGCTCAAGTTTA	1380
QY	301	TACACCTACTTTTGCATGGGGGAAGATAAATGATAAACGACTTCAAGAGCTTGGAGCC	360	QY	1381	TTTCAACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCGACA	1440
Db	301	TACACCTACTTTTGCATGGGGGAAGATAAATGATAAACGACTTCAAGAGCTTGGAGCC	360	Db	1381	TTTCAACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCGACA	1440
QY	361	CGGCATTTCTAGACACTGACATGACATGACTGTGTAGGTTTAGAACTTGTGGTTGAG	420	QY	1441	ACAGAGGTTCTCGGAAGGGAGTATGTACAGGCTGGCTTGTGGTGTGCTTCAGTT	1500
Db	361	CGGCATTTCTAGACACTGACATGACATGACTGTGTAGGTTTAGAACTTGTGGTTGAG	420	Db	1441	ACAGAGGTTCTCGGAAGGGAGTATGTACAGGCTGGCTTGTGGTGTGCTTCAGTT	1500
QY	421	CCGTGGATTGCTGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAGGAGGACAA	480	QY	1501	CTTCAGCCAAACATACATGCATCCCATGAAAGCAGCGGGAGAGCCCTGCTCTTAAGATA	1560
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1681 AAATCCAAAGAACACACCCAGATGGAATTTTGGAGCAATGTGGTGTGTTTGGCTGC 1740
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RESULT 15
US-11-119-096-47
; Sequence 47, Application US/1111096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A.
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119, 096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 47
; LENGTH: 2093
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-47

Query Match 99.1%; Score 2077.4; DB 26; Length 2093;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2092; Conservative 0; Mismatches 1; Indels 4; Gaps 1;

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DB 61 GAAATGTGTGAGCAAGCTGTGTACATGGAATTTCTGCAGATCTTTCACTGTATTAGTGAA 120
QY 121 TCCGATATGATGACCTTAAACCCGAAACAGCTCTCTTGTGTGTGGTTCCTACCAG 180
DB 121 TCCGATATGATGACCTTAAACCCGAAACAGCTCTCTTGTGTGTGGTTCCTACCAG 180
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DB 241 CTGCGGTTGATTTCTTTGTCTCACCTGGGTAATGGGTCTCTGGGTCTCGGTGATTCAGAA 300
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QY 1081 CCTGCGGGATGTTCTCTCCAGTTTCATTTTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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1	2095.4	99.9	3259	3 US-09-318-448-23	Sequence 23, Appl
2	2090.6	99.7	3242	4 US-09-949-016-4215	Sequence 4215, Ap
3	386.4	18.4	390	3 US-08-905-223-71	Sequence 71, Appl
4	380.6	18.1	601	4 US-09-949-016-150019	Sequence 150019,
5	379.4	18.1	35916	4 US-09-949-016-15957	Sequence 15957, A
6	379	18.1	601	4 US-09-949-016-150020	Sequence 150020,
7	190.4	9.1	601	4 US-09-949-016-150037	Sequence 150037,
8	188.8	9.0	601	4 US-09-949-016-150047	Sequence 150047,
9	187.2	8.9	601	4 US-09-949-016-150048	Sequence 150048,
10	186.4	8.9	601	4 US-09-949-016-150046	Sequence 150046,
11	174.4	8.3	2475	4 US-09-566-921-88	Sequence 88, Appl
12	155.2	7.4	601	4 US-09-949-016-150030	Sequence 150030,
13	154.8	7.4	601	4 US-09-949-016-150031	Sequence 150031,
14	129.2	6.2	244	4 US-09-471-276-495	Sequence 495, App
15	127	6.1	601	4 US-09-949-016-150007	Sequence 150007,
16	126.2	6.0	601	4 US-09-949-016-150029	Sequence 150029,
17	123.4	5.9	601	4 US-09-949-016-150008	Sequence 150008,
18	123.4	5.9	601	4 US-09-949-016-150055	Sequence 150055,
19	121.4	5.8	601	4 US-09-949-016-150041	Sequence 150041,
20	121.4	5.8	601	4 US-09-949-016-150042	Sequence 150042,
21	99.4	4.7	601	4 US-09-949-016-150032	Sequence 150032,
22	76	3.6	601	4 US-09-949-016-150018	Sequence 150018,
23	63.6	3.0	4353	2 US-08-365-486A-18	Sequence 18, Appl
24	63.6	3.0	4353	2 US-08-880-342-18	Sequence 18, Appl
25	63.6	3.0	4780	2 US-08-365-486A-20	Sequence 20, Appl
26	63.6	3.0	4780	3 US-09-123-708-3	Sequence 3, Appl
27	63.6	3.0	4780	3 US-09-123-624-3	Sequence 3, Appl

28	63.6	3.0	4780	3 US-08-880-342-20	Sequence 20, Appl
29	57.8	2.8	1292	4 US-09-270-767-10272	Sequence 10272, A
30	57.6	2.7	4079	4 US-09-016-434-1477	Sequence 1477, Ap
31	57.2	2.7	5057	2 US-08-365-486A-12	Sequence 12, Appl
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33	57.2	2.7	5108	1 US-07-642-002-1	Sequence 1, Appli
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36	54.8	2.6	2403	4 US-09-023-655-1226	Sequence 1226, Ap
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44	49.2	2.3	3037	4 US-09-911-781-10	Sequence 10, Appl
45	49.2	2.3	3037	4 US-10-400-902-10	Sequence 10, Appl

ALIGNMENTS

RESULT 1
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; Sequence 23, Application US/09318448
; Patent No. 6210950
; GENERAL INFORMATION:
; APPLICANT: Johnson, William G.
; APPLICANT: Stenroos, Edward S.
; TITLE OF INVENTION: METHODS FOR DIAGNOSING, PREVENTING, AND TREATING
; FILE REFERENCE: 601-1-057
; CURRENT APPLICATION NUMBER: US/09/318,448
; CURRENT FILING DATE: 1999-05-25
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 23
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-318-448-23

Query Match				99.9%; Score 2095.4; DB 3; Length 3259;
Best Local Similarity				100.0%; Pred. No. 0;
Matches 2096; Conservative				0; Mismatches 1; Indels 0; Gaps 0;
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Db	80	ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA	139	
Qy	61	GAATGTGTGAGCAAGCTGTGTACATGGATTTCTGCAGATCTTCACTATTAGTGAA	120	
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Qy	121	TCCGATAAGTATGACCTAAACACCGCAACAGCTCTCTTGTGTGGTTTCTACACAG	180	
Db	200	TCCGATAAGTATGACCTAAACACCGCAACAGCTCTCTTGTGTGGTTTCTACACAG	259	
Qy	181	GGCACCAGGAGACCCACCGGACACAGCCGGAAGTTGTTAAGGAATAACAGAACCA	240	
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Qy	241	CTGCGGTTGATTTCTTTGCTCAGCTCGGTTATGGGTTTCTCGGTGATTTCAGAA	300	
Db	320	CTGCGGTTGATTTCTTTGCTCAGCTCGGTTATGGGTTTCTCGGTGATTTCAGAA	379	
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Qy	361	CGGATTTCTATGACACTGTGATGACATGCTGTGTAGTTTGAAGACTTGTGGTTGAG	420	

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Db 1520 ACAGAGGTTCTCGCGAAGGAGTATGTACAGCTGGCTGGCTTGTGGTTGCTTCAGTT 1579
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Db 1880 ATCTTAATCTCATTAAGGTTTCTCTCAAGAGATGCTCTCTTGGGAGGAGGAAGCC 1939
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RESULT 2

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US-09-949-016-4215
; Sequence 4215, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; PRIOR FILING DATE: 2000-04-14
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4215
; LENGTH: 3242
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-4215
```

```
Query Match 99.7%; Score 2090.6; DB 4; Length 3242;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
```

```
Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGAGGAGGCAAGGCAAGCCATCCAGAA 60
|||||
```


;; APPLICANT: Lacroix, Bruno
;; TITLE OF INVENTION: 5' ESTs FOR SECRETED PROTEINS
;; NUMBER OF SEQUENCES: 503
;; CORRESPONDENCE ADDRESS:
;; ADDRESSEE: Knobbe, Martens, Olson & Bear
;; STREET: 501 West Broadway
;; CITY: San Diego
;; STATE: California
;; COUNTRY: USA
;; ZIP: 92101-3505
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy Disk
;; COMPUTER: IBM PC compatible
;; OPERATING SYSTEM: Win95
;; SOFTWARE: Word
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/905,223
;; FILING DATE:
;; CLASSIFICATION: 536
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Israel, Ned A.
;; REGISTRATION NUMBER: 29,655
;; REFERENCE/DOCKET NUMBER:
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: (619) 235-8550
;; TELEFAX: (619) 235-0176
;; INFORMATION FOR SEQ ID NO: 71:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 390 base pairs
;; TYPE: NUCLEIC ACID
;; STRANDEDNESS: DOUBLE
;; TOPOLOGY: LINEAR
;; MOLECULE TYPE: CDNA
;; ORIGINAL SOURCE:
;; ORGANISM: Homo Sapiens
;; TISSUE TYPE: Brain
;; FEATURE:
;; NAME/KEY: sig_peptide
;; LOCATION: 289..357
;; IDENTIFICATION METHOD: Von Heijne matrix
;; OTHER INFORMATION: score 6.9
;; OTHER INFORMATION: seq SL5LLASHSVSC/SN
US-08-905-223-71

Query Match 18.4%; Score 386.4; DB 3; Length 390;
Best Local Similarity 99.7%; Pred. No. 2.6e-119;
Matches 387; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 968 AGGTACAAGCCTACTCCAAAGACTGCAGCTTGAAGATATAAAGAGAGACACTGCGTCCCTTT 1027
DB 1 AAGTACAAGCCTACTCCAAAGACTGCAGCTTGAAGATATAAAGAGAGACACTGCGTCCCTTT 60
QY 1028 TGAATAAAGGCAGACACAAAGAGAGAGCTTACCTTACCCAGCATATACCTGCGG 1087
DB 61 TGAATAAAGGCAGACACAAAGAGAGAGCTTACCTTACCCAGCATATACCTGCGG 120
QY 1088 GATGTTCTCTCAGTTCAATTTTACTCGGTGTTGAATTCGAGCAATTCCTTAAAGG 1147
DB 121 GATGTTCTCTCAGTTCAATTTTACTCGGTGTTGAATTCGAGCAATTCCTTAAAGG 180
QY 1148 CATTTTTCGAGCCCTTGGACTATACAGTGACAGTCTGAAAGCGCAGGCTACAGG 1207
DB 181 CATTTTTCGAGCCCTTGGACTATACAGTGACAGTCTGAAAGCGCAGGCTACAGG 240
QY 1208 AGCTGTGAGTAAACAAAGGGCAGCCGATTATAGCCGCTTTGTACGAGATGCTGTGCT 1267
DB 241 AGCTGTGAGTAAACAAAGGGCAGCCGATTATAGCCGCTTTGTACGAGATGCTGTGCT 300
QY 1268 GCTTGTGAGTCTCTCTCGTTCCTTTCCTTCTTTCGAGCCACCACTCAGTCTCTGCTCG 1327
DB 301 GCTTGTGAGTCTCTCTCGTTCCTTTCCTTCTTTCGAGCCACCACTCAGTCTCTGCTCG 360
QY 1328 AACATCTTCCCTAAACTTCAACCCAGACC 1355

DB 361 AACATCTTCCCTAAACTTCAACCCAGACC 388
RESULT 4
US-09-949-016-150019
; Sequence 150019, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150019
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150019
Query Match 18.1%; Score 380.6; DB 4; Length 601;
Best Local Similarity 99.7%; Pred. No. 3.2e-117;
Matches 380; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 401 GTTTAGAACTTGTGGTTGAGCCGTGGATTTGCTGACATCTTGCCAGCCCTCAGAAAGCAATT 460
DB 178 GTTTAGAACTTGTGGTTGAGCCGTGGATTTGCTGACATCTTGCCAGCCCTCAGAAAGCAATT 237
QY 461 TTAGTCAAGCAGAGGACAGAGGAGATAGTGGCGCACTCCCGTGGCATCCTCGCAT 520
DB 238 TTAGTCAAGCAGAGGACAGAGGAGATAGTGGCGCACTCCCGTGGCATCCTCGCAT 297
QY 521 CCTTGAGGACAGACCTTGTGAAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTC 580
DB 298 CCTYGAGGACAGACCTTGTGAAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTC 357
QY 581 TGAGATTCGATGATTCAGGAAAGAGATTCCTGAGTTTGAAGCAAAATCGAGTGAACA 640
DB 358 TGAGATTCGATGATTCAGGAAAGAGATTCCTGAGTTTGAAGCAAAATCGAGTGAACA 417
QY 641 GCAACCAATCCAATGTTGTAATTCGAAGACTTTGAGTCTCTACCTTACCCGTTTCGGTACCCC 700
DB 418 GCAACCAATCCAATGTTGTAATTCGAAGACTTTGAGTCTCTACCTTACCCGTTTCGGTACCCC 477
QY 701 CACTCTCAAGCCCTCTCTGAATATTCCTGTTTACCCCAAGATATTTACAGGTACATC 760
DB 478 CACTCTCAAGCCCTCTCTGAATATTCCTGTTTACCCCAAGATATTTACAGGTACATC 537
QY 761 TGCAGGAGTCTCTTGGCCAGG 781
DB 538 TGCAGGAGTCTCTTGGCCAGG 558
RESULT 5
US-09-949-016-15957
; Sequence 15957, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14

; PRIOR APPLICATION NUMBER: 60/241,755
 ; PRIOR FILING DATE: 2000-10-20
 ; PRIOR APPLICATION NUMBER: 60/237,768
 ; PRIOR FILING DATE: 2000-10-03
 ; PRIOR APPLICATION NUMBER: 60/231,498
 ; PRIOR FILING DATE: 2000-09-08
 ; NUMBER OF SEQ ID NOS: 207012
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 15957
 ; LENGTH: 35916
 ; TYPE: DNA
 ; ORGANISM: Human
 US-09-949-016-15957

 Query Match 18.1%; Score 379.4; DB 4; Length 35916;
 Best Local Similarity 99.7%; Pred. No. 1.8e-115;
 Matches 380; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

 Qy 401 GTTTAGAACTTGTGGTTGAGCGGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATT 460
 Db 10781 GTTTAGAACTTGTGGTTGAGCGGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATT 10840

 Qy 461 TTAGTCAAGCAGAGGACAAAGAGAGATAAGTGGCGCACTCCCGTGGCATCAGCTGCAT 520
 Db 10841 TTAGTCAAGCAGAGGACAAAGAGAGATAAGTGGCGCACTCCCGTGGCATCAGCTGCAT 10900

 Qy 521 CCTTGAGCAGACGCTTGTGAAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTC 580
 Db 10901 CCTTGAGCAGACGCTTGTGAAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTC 10960

 Qy 581 TGAGATTCGATGATTCAGGAAGAAAGGATTCAGAGTTTGAAGCAAAATGCAGTGAACA 640
 Db 10961 TGAGATTCGATGATTCAGGAAGAAAGGATTCAGAGTTTGAAGCAAAATGCAGTGAACA 11020

 Qy 641 GCAACCAATCAATGCTTGAATTCAGAGCTTGTAGTCTCACTTACCCGTTCCGTTACCCC 700
 Db 11021 GCAACCAATCAATGCTTGAATTCAGAGCTTGTAGTCTCACTTACCCGTTCCGTTACCCC 11080

 Qy 701 CACTCTCAAGCCCTCTCTGAATATTCCTGGTTTACCCCAAGATATTTACAGGTACATC 760
 Db 11081 CACTCTCAAGCCCTCTCTGAATATTCCTGGTTTACCCCAAGATATTTACAGGTACATC 11140

 Qy 761 TGCAGGAGTCTCTGGCCAGG 781
 Db 11141 TGCAGGAGTCTCTGGCCAGG 11161

 RESULT 6
 US-09-949-016-150020
 ; Sequence 150020, Application US/09949016
 ; Patent No. 6812339
 ; GENERAL INFORMATION:
 ; APPLICANT: VENTER, J. Craig et al.
 ; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
 ; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
 ; FILE REFERENCE: CL001307
 ; CURRENT APPLICATION NUMBER: US/09/949,016
 ; CURRENT FILING DATE: 2000-04-14
 ; PRIOR APPLICATION NUMBER: 60/241,755
 ; PRIOR FILING DATE: 2000-10-20
 ; PRIOR APPLICATION NUMBER: 60/237,768
 ; PRIOR FILING DATE: 2000-10-03
 ; PRIOR APPLICATION NUMBER: 60/231,498
 ; PRIOR FILING DATE: 2000-09-08
 ; NUMBER OF SEQ ID NOS: 207012
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 150020
 ; LENGTH: 601
 ; TYPE: DNA
 ; ORGANISM: Human
 US-09-949-016-150020

 Query Match 18.1%; Score 379; DB 4; Length 601;

Best Local Similarity 99.5%; Pred. No. 1.1e-116;
 Matches 379; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

 Qy 401 GTTTAGAACTTGTGGTTGAGCGGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATT 460
 Db 165 GTTTAGAACTTGTGGTTGAGCGGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATT 224

 Qy 461 TTAGTCAAGCAGAGGACAAAGAGAGATAAGTGGCGCACTCCCGTGGCATCAGCTGCAT 520
 Db 225 TTAGTCAAGCAGAGGACAAAGAGAGATAAGTGGCGCACTCCCGTGGCATCAGCTGCAT 284

 Qy 521 CCTTGAGCAGACGCTTGTGAAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTC 580
 Db 285 CCTTGAGCAGACGCTTGTGAAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTC 344

 Qy 581 TGAGATTCGATGATTCAGGAAGAAAGGATTCAGAGTTTGAAGCAAAATGCAGTGAACA 640
 Db 345 TGAGATTCGATGATTCAGGAAGAAAGGATTCAGAGTTTGAAGCAAAATGCAGTGAACA 404

 Qy 641 GCAACCAATCAATGCTTGAATTCAGAGCTTGTAGTCTCACTTACCCGTTCCGTTACCCC 700
 Db 405 GCAACCAATCAATGCTTGAATTCAGAGCTTGTAGTCTCACTTACCCGTTCCGTTACCCC 464

 Qy 701 CACTCTCAAGCCCTCTCTGAATATTCCTGGTTTACCCCAAGATATTTACAGGTACATC 760
 Db 465 CACTCTCAAGCCCTCTCTGAATATTCCTGGTTTACCCCAAGATATTTACAGGTACATC 524

 Qy 761 TGCAGGAGTCTCTGGCCAGG 781
 Db 525 TGCAGGAGTCTCTGGCCAGG 545

 RESULT 7
 US-09-949-016-150037
 ; Sequence 150037, Application US/09949016
 ; Patent No. 6812339
 ; GENERAL INFORMATION:
 ; APPLICANT: VENTER, J. Craig et al.
 ; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
 ; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
 ; FILE REFERENCE: CL001307
 ; CURRENT APPLICATION NUMBER: US/09/949,016
 ; CURRENT FILING DATE: 2000-04-14
 ; PRIOR APPLICATION NUMBER: 60/241,755
 ; PRIOR FILING DATE: 2000-10-20
 ; PRIOR APPLICATION NUMBER: 60/237,768
 ; PRIOR FILING DATE: 2000-10-03
 ; PRIOR APPLICATION NUMBER: 60/231,498
 ; PRIOR FILING DATE: 2000-09-08
 ; NUMBER OF SEQ ID NOS: 207012
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 150037
 ; LENGTH: 601
 ; TYPE: DNA
 ; ORGANISM: Human
 US-09-949-016-150037

 Query Match 9.1%; Score 190.4; DB 4; Length 601;
 Best Local Similarity 99.5%; Pred. No. 4.7e-53;
 Matches 191; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

 Qy 1369 AGCTCAAGTTTATTTTACCAGGAAAGCTCCATTGTTCTTCAACATTGTGGAATTTCTG 1428
 Db 18 AGCTCAAGTTTATTTTACCAGGAAAGCTCCATTGTTCTTCAACATTGTGGAATTTCTG 77

 Qy 1429 TCTACTGCCAACACAGAGGTTCTCGGAAGGAGATGTACAGGCTGGCTGGCTTGTGTTG 1488
 Db 78 TCTACTGCCAACACAGAGGTTCTCGGAAGGAGATGTATGTATACAGGCTGGCTGGCTTGTGTTG 137

 Qy 1489 GTTGCTTCAGTTCTTTCAGCCAAACATACATCTCCCATGAAGACAGCGGGAAGCCCTG 1548
 Db 138 GTTGCTTCAGTTCTTTCAGCCAAACATACATCTCCCATGAAGACAGCGGGAAGCCCTG 197

```
Qy 1549 GCTCCTAAGATA 1560
      |||||
Db 198 GCTCCTAAGGTA 209

RESULT 8
US-09-949-016-150047
; Sequence 150047, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150047
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
; US-09-949-016-150047

Query Match          9.0%; Score 188.8; DB 4; Length 601;
Best Local Similarity 93.3%; Pred. No. 1.6e-52;
Matches 196; Conservative 1; Mismatches 13; Indels 0; Gaps 0;

Qy 1765 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 1824
Db 191 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 250

Qy 1825 TTCTCAAGAGATGCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTATGTACAAGACAAC 1884
Db 251 TTCTCAAGAGATGCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTATGTACAAGACAAC 310

Qy 1885 ATCCAGCTTTCATGCGCAGAGTGCGGAGAGATCTCTCCAGGAGAGAGCGGCATATTTAT 1944
Db 311 ATCCAGCTTTCATGCGCAGAGTGCGGAGAGATCTCTCCAGGAGAGAGCGGCATATTTAT 370

Qy 1945 GTGTGTGGAGATGCAAGAATATGCGCCAAG 1974
Db 371 GTGTGTGGTGAGTCATTATCGTGCCTAAG 400

RESULT 9
US-09-949-016-150048
; Sequence 150048, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150048
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
; US-09-949-016-150048
```

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; ORGANISM: Human
US-09-949-016-150048

Query Match          8.9%; Score 187.2; DB 4; Length 601;
Best Local Similarity 92.9%; Pred. No. 5.7e-52;
Matches 195; Conservative 1; Mismatches 14; Indels 0; Gaps 0;

Qy 1765 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 1824
Db 155 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 214

Qy 1825 TTCTCAAGAGATGCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTATGTACAAGACAAC 1884
Db 215 TTCTCAAGAGATGCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTATGTACAAGACAAC 274

Qy 1885 ATCCAGCTTTCATGCGCAGAGTGCGGAGAGATCTCTCCAGGAGAGAGCGGCATATTTAT 1944
Db 275 ATCCAGCTTTCATGCGCAGAGTGCGGAGAGATCTCTCCAGGAGAGAGCGGCATATTTAT 334

Qy 1945 GTGTGTGGAGATGCAAGAATATGCGCCAAG 1974
Db 335 GTGTGTGGTGAGTCATTATCGTGCCTAAG 364

RESULT 10
US-09-949-016-150046
; Sequence 150046, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150046
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
; US-09-949-016-150046

Query Match          8.9%; Score 186.4; DB 4; Length 601;
Best Local Similarity 99.5%; Pred. No. 1.1e-51;
Matches 187; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1765 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 1824
Db 413 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 472

Qy 1825 TTCTCAAGAGATGCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTATGTACAAGACAAC 1884
Db 473 TTCTCAAGAGATGCTCTGTTGGGAGGAGAGAGCCAGCAAAAGTATGTACAAGACAAC 532

Qy 1885 ATCCAGCTTTCATGCGCAGAGTGCGGAGAGATCTCTCCAGGAGAGAGCGGCATATTTAT 1944
Db 533 ATCCAGCTTTCATGCGCAGAGTGCGGAGAGATCTCTCCAGGAGAGAGCGGCATATTTAT 592

Qy 1945 GTGTGTGG 1952
Db 593 GTGTGTGG 600

RESULT 11
US-09-566-921-88
; Sequence 88, Application US/09566921
```

Patent No. 6682888
; GENERAL INFORMATION:
; APPLICANT: Loring, Jeanne F.
; APPLICANT: Tingley, Debora W.
; APPLICANT: Edwards, Carla M.
; TITLE OF INVENTION: GENES EXPRESSED IN ALZHEIMER'S DISEASE
; FILE REFERENCE: PA-0224 US
; CURRENT APPLICATION NUMBER: US/09/566,921
; CURRENT FILING DATE: 2000-05-05
; NUMBER OF SEQ ID NOS: 138
; SOFTWARE: PERL Program
; SEQ ID NO 88
; LENGTH: 2475
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. 6682888 255828.26
; NAME/KEY: unsure
; LOCATION: 1001, 1011
; OTHER INFORMATION: a, t, c, g, or other
US-09-566-921-88

Query Match 8.3%; Score 174.4; DB 4; Length 2475;
Best Local Similarity 96.7%; Pred. No. 3.4e-47;
Matches 178; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
QY 510 ATCACTTCGATCCTTGAGGACAGACTTGTGAAGTCAGAGCTGCTACACATTGAATCTCA 569
DB 1 ATCACTTCGATCCTTGAGGACAGACTTGTGAAGTCAGAGCTGCTACACATTGAATCTCA 60
QY 570 AGTCAGCTTCTGAGATTCGATGATTTCAGGAGAAAGGATTCGAGGTTTTGAAGCAAAA 629
DB 61 AGTCAGCTTCTGAGATTCGATGATTTCAGGAGAAAGGATTCGAGGTTTTGAAGCAAAA 120
QY 630 TGCAGTGAACGACCAACCAATCCAAATGTTGAATTCGAAGACTTGAGTCTCATTACCG 689
DB 121 TGCAGTGAACGACCAACCAATCCAAATGTTGAATTCGAAGACTTGAGTCTCATTACCG 180
QY 690 TTGC 693
DB 181 TTGC 184

RESULT 12
US-09-949-016-150030
; Sequence 150030, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150030
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150030

Query Match 7.4%; Score 155.2; DB 4; Length 601;
Best Local Similarity 98.1%; Pred. No. 3.5e-41;
Matches 157; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 899 TTTCAAATACAGACTTTTCTATCAGCCTGAGATGCTTCAGCGTGATCTGCCCTAACA 958
DB 315 TCTAGAAATACAGACTTTTCTATCAGCCTGAGATGCTTCAGCGTGATCTGCCCTAACA 374
QY 959 GTGATTCGAGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGCACT 1018
DB 375 GTGATTCGAGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGCACT 434
QY 1019 GCGTCTCTTTGAAAATAAAGGCAGACACACAAAGAAAGG 1058
DB 435 GCGTCTCTTTGAAAATAAAGGCAGACACACAAAGAAAGG 474

RESULT 13
US-09-949-016-150031
; Sequence 150031, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150031
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150031

Query Match 7.4%; Score 154.8; DB 4; Length 601;
Best Local Similarity 97.5%; Pred. No. 4.8e-41;
Matches 156; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 899 TTTCAAATACAGACTTTTCTATCAGCCTGAGATGCTTCAGCGTGATCTGCCCTAACA 958
DB 151 TCTAGAAATACAGACTTTTCTATCAGCCTGAGATGCTTCAGCGTGATCTGCCCTAACA 210
QY 959 GTGATTCGAGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGCACT 1018
DB 211 GTGATTCGAGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGCACT 270
QY 1019 GCGTCTCTTTGAAAATAAAGGCAGACACACAAAGAAAGG 1058
DB 271 GCGTCTCTTTGAAAATAAAGGCAGACACACAAAGAAAGG 310

RESULT 14
US-09-471-276-495
; Sequence 495, Application US/09471276
; Patent No. 6822072
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Duclert A.
; APPLICANT: Giordano, J.Y.
; TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
; Patent No. 6822072
; FILE REFERENCE: GENSET.025CPI
; CURRENT APPLICATION NUMBER: US/09/471,276
; CURRENT FILING DATE: 1999-12-21
; EARLIER APPLICATION NUMBER: 09/057,719
; EARLIER FILING DATE: 1998-04-09
; EARLIER APPLICATION NUMBER: 09/069,047
; EARLIER FILING DATE: 1998-04-28
; EARLIER APPLICATION NUMBER: PCT/IB99/00712

; EARLIER FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 1622
; SOFTWARE: Patent.pm
; SEQ ID NO 495
; LENGTH: 244
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 70..243
; NAME/KEY: sig_peptide
; LOCATION: 70..114
; OTHER INFORMATION: Von Heijne matrix
; OTHER INFORMATION: score 4.40000009536743
; OTHER INFORMATION: seq RFLLLYATQQQA/KA
US-09-471-276-495

Query Match 6.2%; Score 129.2; DB 4; Length 244;
Best Local Similarity 87.5%; Pred. No. 1.1e-32;
Matches 140; Conservative 1; Mismatches 19; Indels 0; Gaps 0;

Qy 1 ATGAGGAGGTTTCGTTACTATATGCTACAGCAGGACAGGCAAGGCCCATCGCAGAA 60
Db 70 ATGAGGAGGTTTCGTTACTATATGCTACAGCAGGACAGGCAAGGCCCATCGCAGAA 129

Qy 61 GAAATGTGTGAGCAAGCTGTGCTACATGATTTTCTGCAGATCTTCACTATATTAGTGAA 120
Db 130 GAAATGTGTGAGCAAGCTGTGCTACATGATTTTCTGCAGATCTTCACTATATTAGTGAA 189

Qy 121 TCCGATAAGTATGACCTAAACCGAAACAGACTCTCTTTG 160
Db 190 TCCGATAAGGTCCTGGTGATTTCAGATACACCTACTTTTG 229

RESULT 15
US-09-949-016-150007
; Sequence 150007, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150007
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150007

Query Match 6.1%; Score 127; DB 4; Length 601;
Best Local Similarity 98.4%; Pred. No. 1.2e-31;
Matches 127; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 ATGAGGAGGTTTCGTTACTATATGCTACAGCAGGACAGGCAAGGCCCATCGCAGAA 60
Db 236 ATGAGGAGGTTTCGTTACTATATGCTACAGCAGGACAGGCAAGGCCCATCGCAGAA 295

Qy 61 GAAATGTGTGAGCAAGCTGTGCTACATGATTTTCTGCAGATCTTCACTATATTAGTGAA 120
Db 296 GAAATGTGTGAGCAAGCTGTGCTACATGATTTTCTGCAGATCTTCACTATATTAGTGAA 355

Qy 121 TCCGATAAG 129
Db 121 TCCGATAAG 129

Db 356 TCCGATAAG 364

Search completed: November 8, 2005, 17:00:51
Job time : 236.757 secs

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: November 8, 2005, 16:35:10 ; Search time 1123.15 Seconds
(without alignments)
15440.336 Million cell updates/sec

Title: US-09-371-347A-43

Perfect score: 2097

Sequence: 1 atgaggagggtttctgtact.....ttcaggatattgtcataa 2097

Scoring table:

IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 9794790 seqs, 4134909567 residues

Total number of hits satisfying chosen parameters: 19589580

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Published Applications NA:*

- 1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq.*
- 2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq.*
- 3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq.*
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- 16: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq.*
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- 18: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq.*
- 19: /cgn2_6/ptodata/1/pubpna/US10F_PUBCOMB.seq.*
- 20: /cgn2_6/ptodata/1/pubpna/US10G_PUBCOMB.seq.*
- 21: /cgn2_6/ptodata/1/pubpna/US10H_PUBCOMB.seq.*
- 22: /cgn2_6/ptodata/1/pubpna/US10I_PUBCOMB.seq.*
- 23: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq.*
- 24: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq.*
- 25: /cgn2_6/ptodata/1/pubpna/US11A_PUBCOMB.seq.*
- 26: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq.*
- 27: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq.*
- 28: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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1	2097	100.0	2097	10	US-09-371-347-43
2	2097	100.0	2097	26	US-11-119-096-43
3	2095.4	99.9	2097	10	US-09-371-347-1
4	2095.4	99.9	2097	26	US-11-119-096-1
5	2095.4	99.9	3259	10	US-09-371-347-24

6	2095.4	99.9	3259	24	US-10-450-763-874	Sequence 874, App
7	2095.4	99.9	3259	26	US-11-119-096-24	Sequence 24, Appl
8	2093.8	99.8	2097	10	US-09-371-347-41	Sequence 41, Appl
9	2093.8	99.8	2097	26	US-11-119-096-41	Sequence 41, Appl
10	2087	99.5	3256	22	US-10-741-600-692	Sequence 692, App
11	2087	99.5	3274	22	US-10-741-600-693	Sequence 693, App
12	2079.4	99.2	2094	10	US-09-371-347-45	Sequence 45, Appl
13	2079.4	99.2	2094	26	US-11-119-096-45	Sequence 45, Appl
14	2077.4	99.1	2093	10	US-09-371-347-47	Sequence 47, Appl
15	2077.4	99.1	2093	26	US-11-119-096-47	Sequence 47, Appl
16	379.8	18.1	43985	22	US-10-741-600-17757	Sequence 17757, A
17	379.8	18.1	591	17	US-10-029-386-6369	Sequence 6369, App
18	377.8	18.0	591	17	US-10-029-386-1735	Sequence 1735, Ap
19	377.4	18.0	379	17	US-10-029-386-20100	Sequence 20100, A
20	375.8	17.9	379	17	US-10-029-386-15435	Sequence 15435, A
21	286	13.6	583	13	US-09-925-065A-758988	Sequence 758988,
22	284.8	13.6	583	13	US-09-925-065A-827971	Sequence 827971,
23	275.8	13.2	503	24	US-10-450-763-873	Sequence 873, App
24	200.6	9.6	201	22	US-10-741-600-15583	Sequence 15583, A
25	200.6	9.6	201	22	US-10-741-600-15584	Sequence 15584, A
26	200.6	9.6	201	22	US-10-741-600-15589	Sequence 15589, A
27	200.6	9.6	201	22	US-10-741-600-15590	Sequence 15590, A
28	200.6	9.6	201	22	US-10-741-600-15592	Sequence 15592, A
29	200.6	9.6	201	22	US-10-741-600-15593	Sequence 15593, A
30	200.6	9.6	201	22	US-10-741-600-15594	Sequence 15594, A
31	200.6	9.6	201	22	US-10-741-600-15598	Sequence 15598, A
32	200.6	9.6	201	22	US-10-741-600-15599	Sequence 15599, A
33	200.6	9.6	201	22	US-10-741-600-15600	Sequence 15600, A
34	200.6	9.6	201	22	US-10-741-600-15602	Sequence 15602, A
35	200.6	9.6	201	22	US-10-741-600-15606	Sequence 15606, A
36	200.6	9.6	201	22	US-10-741-600-15609	Sequence 15609, A
37	200.6	9.6	201	22	US-10-741-600-15610	Sequence 15610, A
38	200.6	9.6	201	22	US-10-741-600-15612	Sequence 15612, A
39	200.6	9.6	201	22	US-10-741-600-15613	Sequence 15613, A
40	200.6	9.6	201	22	US-10-741-600-15614	Sequence 15614, A
41	200.6	9.6	201	22	US-10-741-600-15620	Sequence 15620, A
42	200.6	9.6	201	22	US-10-741-600-15621	Sequence 15621, A
43	200.6	9.6	201	22	US-10-741-600-15623	Sequence 15623, A
44	200.6	9.6	201	22	US-10-741-600-15624	Sequence 15624, A
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ALIGNMENTS

RESULT 1

US-09-371-347-43

; Sequence 43, Application US/09371347

; Publication No. US20030082676A1

; GENERAL INFORMATION:

; APPLICANT: Roy A. Gravel et al.

; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:

; TITLE OF INVENTION: CLONING AND METHODS FOR EVALUATING RISK OF NEURAL TUBE

; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER

; FILE REFERENCE: 50004/003003

; CURRENT APPLICATION NUMBER: US/09/371.347

; CURRENT FILING DATE: 1999-08-10

; PRIOR FILING DATE: 60/071,622

; PRIOR FILING DATE: 1998-01-16

; PRIOR APPLICATION NUMBER: 09/232,028

; PRIOR FILING DATE: 1999-01-15

; NUMBER OF SEQ ID NOS: 51

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 43

; LENGTH: 2097

; TYPE: DNA

; ORGANISM: Homo sapiens

US-09-371-347-43

Query Match 100.0%; Score 2097; DB 10; Length 2097;

Best Local Similarity 100.0%; Pred. No. 0;

Matches 2097; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 1 ATGAGGAGTTCTGTTACTATATGCTACAGCAGGACAGCAAGGCCATCGCAGAA 60
Db |||||
Qy 61 GAAATGTTGAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTATATTAGTGAA 120
Db |||||
Qy 61 GAAATGTTGAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTATATTAGTGAA 120
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Qy 121 TCCGATTAAGTATGACCTAAACCGAACCGAACAGCTCTCTTGTGTGTGGTTCTTACCACG 180
Db |||||
Qy 121 TCCGATTAAGTATGACCTAAACCGAACCGAACAGCTCTCTTGTGTGTGGTTCTTACCACG 180
Db |||||
Qy 181 GGCACCGGAGACCCACCGCACACAGCCGCAAGTTTGTAAAGAAATACAGAAACCAACA 240
Db |||||
Qy 181 GGCACCGGAGACCCACCGCACACAGCCGCAAGTTTGTAAAGAAATACAGAAACCAACA 240
Db |||||
Qy 241 CTGCCGTTGATTTCTTTGTCTCACCTCGCGTATGGGTTACTGGGTCTCGGTGATTTCAGAA 300
Db |||||
Qy 241 CTGCCGTTGATTTCTTTGTCTCACCTCGCGTATGGGTTACTGGGTCTCGGTGATTTCAGAA 300
Db |||||
Qy 301 TACACCTACTTTTGCATCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 480
Db |||||
Qy 301 TACACCTACTTTTGCATCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 480
Db |||||
Qy 361 CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGTCTTGTGGTTGAG 420
Db |||||
Qy 361 CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGTCTTGTGGTTGAG 420
Db |||||
Qy 421 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 480
Db |||||
Qy 481 GAGGAGTAAGTGGGCACTCCCGTGGCATCTACCTGCATCTTGAAGCAGAGCTTGTG 540
Db |||||
Qy 481 GAGGAGTAAGTGGGCACTCCCGTGGCATCTACCTGCATCTTGAAGCAGAGCTTGTG 540
Db |||||
Qy 541 AAGTCAGAGCTGTACACATTTCAAGTTCAGAGCTTCTGAGATTCGATGATTTCAGGA 600
Db |||||
Qy 541 AAGTCAGAGCTGTACACATTTCAAGTTCAGAGCTTCTGAGATTCGATGATTTCAGGA 600
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Qy 601 AGAAAGGATCTGAGGTTTGAAGCAAAATGCAGTGAAACAGCAACCAATCCAAATGTTGTA 660
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Qy 601 AGAAAGGATCTGAGGTTTGAAGCAAAATGCAGTGAAACAGCAACCAATCCAAATGTTGTA 660
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Qy 661 ATTTAGAGCTTTGAGTCTCTACTTACCCGTTCCGTTACCCCACTCTCAAGCCCTCTCTG 720
Db |||||
Qy 661 ATTTAGAGCTTTGAGTCTCTACTTACCCGTTCCGTTACCCCACTCTCAAGCCCTCTCTG 720
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Qy 721 AATATTCCTGTTTACCCCAAGATATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 780
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Qy 721 AATATTCCTGTTTACCCCAAGATATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 780
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Qy 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTCAGAGTCCCAATTTCAAAG 840
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Qy 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTCAGAGTCCCAATTTCAAAG 840
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Qy 841 GCAGTTCAACTTATCTACGAATGATGCCATAAAACCACTCTGCTGGTGAATTTGACATTT 900
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Qy 961 GATTTCTGAGGTACAAAGCTTACTCCAAAGACTGCAGCTTGAAGTAAAGAGAGCACTGC 1020
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Qy 961 GATTTCTGAGGTACAAAGCTTACTCCAAAGACTGCAGCTTGAAGTAAAGAGAGCACTGC 1020
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Qy 1021 GTCTTTTGAATAAAGCGACACAAAGAAAGAGAGCTACCTTACCCGACATATA 1080
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Qy 1021 GTCTTTTGAATAAAGCGACACAAAGAAAGAGAGCTACCTTACCCGACATATA 1080
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Qy 1081 CCTGGGATGTTCTCTCCAGTTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140

Db 1081 CCTGGGATGTTCTCTCCAGTTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Qy 1141 AAAAAGGCATTTTTCGAGCCCTTGTGACATATACAGTGACAGTGTGAAAAGCGCAGG 1200
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Qy 1141 AAAAAGGCATTTTTCGAGCCCTTGTGACATATACAGTGACAGTGTGAAAAGCGCAGG 1200
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Qy 1201 CTACAGAGCTGTGACGATAACCAAGGGGACCGATATATAGCCCTTGTACGAGATGCC 1260
Db |||||
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Qy 1261 TGTGCTGCTGTTTGGATCTCTCTCGCTTCCCTTCTTTCGCCAGCCACCTCAGTCTC 1320
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Qy 1261 TGTGCTGCTGTTTGGATCTCTCTCGCTTCCCTTCTTTCGCCAGCCACCTCAGTCTC 1320
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Qy 1321 CTGCTCGAAATCTTCTTAAATCTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
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Qy 1321 CTGCTCGAAATCTTCTTAAATCTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
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Qy 1381 TTTTACCCAGGAAAGCTCCATTTTGTCTTCAACATTGTGGAATTTCTGTCTACTGCCACA 1440
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Qy 1561 TCCATCTCTCTCGAACAACAATTTTCCACATTACAGATGACCCCTCAATCCCAATC 1620
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Qy 1921 CTCCAG 1980
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Qy 2041 AAAACCCCTGGCCATTTTAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2097
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Db |||||

RESULT 2

US-11-119-096-43
; Sequence 43, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:

APPLICANT: Gravel, Roy A,
APPLICANT: Rozen, Rima
APPLICANT: Leclerc, Daniel
APPLICANT: Wilson, Aaron
APPLICANT: Rosenblatt, David
TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE;
TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
FILE REFERENCE: 50004/003005
CURRENT APPLICATION NUMBER: US/11/119,096
CURRENT FILING DATE: 2005-04-29
PRIOR APPLICATION NUMBER: 09/487,841
PRIOR FILING DATE: 2000-01-19
PRIOR APPLICATION NUMBER: 09/371,347
PRIOR FILING DATE: 1999-08-10
PRIOR APPLICATION NUMBER: 09/232,028
PRIOR FILING DATE: 1999-01-15
PRIOR APPLICATION NUMBER: 60/071,622
PRIOR FILING DATE: 1998-01-16
NUMBER OF SEQ ID NOS: 63
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 43
LENGTH: 2097
TYPE: DNA
ORGANISM: Homo sapiens
US-11-119-096-43

Query Match		100.0%	Score 2097;	DB 26;	Length 2097;
Best Local Similarity		100.0%	Pred. No. 0;		
Matches 2097;		Conservative	0;	Mismatches	0; Indels 0; Gaps 0;
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Db	1	ATGAGGAGTTCTGTTACTATATGCTACAGCAGGAGGACAGGCAAGGCCATCCAGAA	60		
Qy	61	GAATGTGTGACAGCTGTGTACATGATTTCTCGAGATCTTCACATATATAGTGA	120		
Db	61	GAATGTGTGACAGCTGTGTACATGATTTCTCGAGATCTTCACATATATAGTGA	120		
Qy	121	TCCGATAAGTATGACCTAAACCCGAAACAGCTCTCTTTGTTGTTGTTCTTACACG	180		
Db	121	TCCGATAAGTATGACCTAAACCCGAAACAGCTCTCTTTGTTGTTGTTCTTACACG	180		
Qy	181	GGCAGGAGACCCACCCGACACAGCCGCAAGTTGTTAAGGAAATACAGAACCAACA	240		
Db	181	GGCAGGAGACCCACCCGACACAGCCGCAAGTTGTTAAGGAAATACAGAACCAACA	240		
Qy	241	CTGCCGTTGATTTCTTTGCTCACCTGCGGTATGGTTACTGGGTCTCGGTGATTCAGAA	300		
Db	241	CTGCCGTTGATTTCTTTGCTCACCTGCGGTATGGTTACTGGGTCTCGGTGATTCAGAA	300		
Qy	301	TACACTACTTTTGCATGGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC	360		
Db	301	TACACTACTTTTGCATGGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC	360		
Qy	361	CGGCATTTCTATGACACATCGACATGCTGTAGGTTTAACTTGTGTTGAG	420		
Db	361	CGGCATTTCTATGACACATCGACATGCTGTAGGTTTAACTTGTGTTGAG	420		
Qy	421	CCGTGGATTGCTGGACTTGGCCAGCCCTCAGAAAGCATTTTAGTCAAGCAGAGGACAA	480		
Db	421	CCGTGGATTGCTGGACTTGGCCAGCCCTCAGAAAGCATTTTAGTCAAGCAGAGGACAA	480		
Qy	481	GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGTCATCTTGGAGCAGACCTTGTG	540		
Db	481	GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGTCATCTTGGAGCAGACCTTGTG	540		
Qy	541	AAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600		
Db	541	AAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600		
Qy	601	AGAAAGGATTCGAGGTTTGNAGCAAAATGCAAGTGAACAGGCAACCAATCCATGTTGTA	660		

Db	601	AGAAAGGATTCGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCATGTTGTA	660
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Db	661	ATTGAAGACTTTTGAGTCTCTCACTTACCGGTTGGTACCCCACTCTCAAGGCTCTCTG	720
Qy	721	AATATTCCTGTTTACCCCAAGATATTTACAGGTACATCTGCAGGAGTCTCTGGCCAG	780
Db	721	AATATTCCTGTTTACCCCAAGATATTTACAGGTACATCTGCAGGAGTCTCTGGCCAG	780
Qy	781	GAGGAAAGCCCAAGTATCTGTGACTTCAGCAGATCCAGTTTTCAGTGCCCAATTTCAAG	840
Db	781	GAGGAAAGCCCAAGTATCTGTGACTTCAGCAGATCCAGTTTTCAGTGCCCAATTTCAAG	840
Qy	841	GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTGGACATT	900
Db	841	GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTGGACATT	900
Qy	901	TCAAATACAGACTTTTCTATCAGCTGGAGATGCTTACGGGTGATCTGCCCTAACAGT	960
Db	901	TCAAATACAGACTTTTCTATCAGCTGGAGATGCTTACGGGTGATCTGCCCTAACAGT	960
Qy	961	GATTCGAGGTACAAAGCTTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGACATGC	1020
Db	961	GATTCGAGGTACAAAGCTTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGACATGC	1020
Qy	1021	GTCTTTTGAATAAAGGACAGACAAAGAAAGAGGAGCTACCTTACCCAGCATATA	1080
Db	1021	GTCTTTTGAATAAAGGACAGACAAAGAAAGAGGAGCTACCTTACCCAGCATATA	1080
Qy	1081	CTCGGGGATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT	1140
Db	1081	CTCGGGGATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT	1140
Qy	1141	AAAAAGGCATTTTGCAGAGCCCTTGTGACTATACCACTGACAGTGTGAAAAGCGCAGG	1200
Db	1141	AAAAAGGCATTTTGCAGAGCCCTTGTGACTATACCACTGACAGTGTGAAAAGCGCAGG	1200
Qy	1201	CTACAGGAGCTGTGCAGTAAACAAAGGGGACCCGATTTATAGCCGCTTTGTACGAGATGCC	1260
Db	1201	CTACAGGAGCTGTGCAGTAAACAAAGGGGACCCGATTTATAGCCGCTTTGTACGAGATGCC	1260
Qy	1261	TGTGCTGCTTGTGGATCTCTCTCGCTTTCCTTCTTCCGACGCAACATCTAGTCTC	1320
Db	1261	TGTGCTGCTTGTGGATCTCTCTCGCTTTCCTTCTTCCGACGCAACATCTAGTCTC	1320
Qy	1321	CTGCTCGAACAATCTTCTTAAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA	1380
Db	1321	CTGCTCGAACAATCTTCTTAAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA	1380
Qy	1381	TTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA	1440
Db	1381	TTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA	1440
Qy	1441	ACAGAGTTCTGCGGAAGGAGTATGACAGCTGGCTGGCTTGTGGTTCGTTTCAGTT	1500
Db	1441	ACAGAGTTCTGCGGAAGGAGTATGACAGCTGGCTGGCTTGTGGTTCGTTTCAGTT	1500
Qy	1501	CTTCAGCAACATACATGCAATCCCATGACAGCAGCGGAAAGCCCTGGCTCTTAAGATA	1560
Db	1501	CTTCAGCAACATACATGCAATCCCATGACAGCAGCGGAAAGCCCTGGCTCTTAAGATA	1560
Qy	1561	TCCATCTCTCTCGAAACAACTTTCTTCCATTTACAGATGACCCCTCAATCCCAATC	1620
Db	1561	TCCATCTCTCTCGAAACAACTTTCTTCCATTTACAGATGACCCCTCAATCCCAATC	1620
Qy	1621	ATAATGTGGGTCCAGGAAACCGGATGACCCCGTTTATTTGGGTTCTTCAACATAGAGAG	1680
Db	1621	ATAATGTGGGTCCAGGAAACCGGATGACCCCGTTTATTTGGGTTCTTCAACATAGAGAG	1680
Qy	1681	AAATCCCAAGAACCAACCCAGATGGAATTTTCGAGCAATGCTGGTGTGTTTTGGGCTGC	1740
Db	1681	AAATCCCAAGAACCAACCCAGATGGAATTTTCGAGCAATGCTGGTGTGTTTTGGGCTGC	1740

Qy	1741	AGGCATTAAGGATAGGGATTATCTATTTCAGAAAAGAGCTCAGACATTTCCCTTTAAGCATGGG	1800
Db	1741	AGGCATTAAGGATAGGGATTATCTATTTCAGAAAAGAGCTCAGACATTTCCCTTTAAGCATGGG	1800
Qy	1801	ATCTTAACCTCATCTAARAGGTTTCCTTCTCAAGAGATGCTCCTGTGGGGAGGAGGAGCC	1860
Db	1801	ATCTTAACCTCATCTAARAGGTTTCCTTCTCAAGAGATGCTCCTGTGTGGGAGGAGGAGCC	1860
Qy	1861	CCAGCAAGATGTATCAAGACCAACATCCAGCTTCATGGCCAGCAGGTGGCGAGAAATCCTC	1920
Db	1861	CCAGCAAGATGTATCAAGACCAACATCCAGCTTCATGGCCAGCAGGTGGCGAGAAATCCTC	1920
Qy	1921	CTCCAGGAGAAACGGCCATATTTATGTGTGGAGATCAAAGAATATGGCCAAAGGATGTA	1980
Db	1921	CTCCAGGAGAAACGGCCATATTTATGTGTGTGGAGATCAAAGAATATGGCCAAAGGATGTA	1980
Qy	1981	CATGATCCCTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACCTAGAGCAATG	2040
Db	1981	CATGATCCCTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACCTAGAGCAATG	2040
Qy	2041	AAAACCCCTGGCCACTTTTAAAGAGAAAAACGCTACCTTCAGGATATTTGGTCATAA	2097
Db	2041	AAAACCCCTGGCCACTTTTAAAGAGAAAAACGCTACCTTCAGGATATTTGGTCATAA	2097
RESULT 3			
US-09-371-347-1			
; Sequence 1, Application US/09371347			
; Publication No. US20030082676A1			
; GENERAL INFORMATION:			
; APPLICANT: Roy A. Gravel et al.			
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:			
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE			
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER			
; FILE REFERENCE: 50004/003003			
; CURRENT APPLICATION NUMBER: US/09/371,347			
; CURRENT FILING DATE: 1999-08-10			
; PRIOR APPLICATION NUMBER: 60/071,622			
; PRIOR FILING DATE: 1998-01-16			
; PRIOR APPLICATION NUMBER: 09/232,028			
; PRIOR FILING DATE: 1999-01-15			
; NUMBER OF SEQ ID NOS: 51			
; SOFTWARE: FastSeq for Windows Version 4.0			
; SEQ ID NO 1			
; LENGTH: 2097			
; TYPE: DNA			
; ORGANISM: Homo sapiens			
US-09-371-347-1			
Query Match 99.9%; Score 2095.4; DB 10; Length 2097;			
Best Local Similarity 100.0%; Pred. No. 0;			
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;			
Qy	1	ATGAGGAGGTTTCGTGTACTATATGCTACAGCAGGACAGGCAAAAGGCCATCGCAGAA	60
Db	1	ATGAGGAGGTTTCGTGTACTATATGCTACAGCAGGACAGGCAAAAGGCCATCGCAGAA	60
Qy	61	GAATGTGTGACGAAGCTGTGGTACATGGAATTTCTGCAGATCTTCCTACTATATTAGTCAA	120
Db	61	GAATGTGTGACGAAGCTGTGGTACATGGAATTTCTGCAGATCTTCCTACTATATTAGTCAA	120
Qy	121	TCCGATTAAGTATGACCTTAAACCGAACAAGCTCTCTGTGTGTGTGTGTGTCTTACACAG	180
Db	121	TCCGATTAAGTATGACCTTAAACCGAACAAGCTCTCTCTGTGTGTGTGTGTGTCTTACACAG	180
Qy	181	GGCACCGGAGACCCACCGACACAGCCGCAAGTTTGTAAAGSAAATAACAGAAACCAACA	240
Db	181	GGCACCGGAGACCCACCGACACAGCCGCAAGTTTGTAAAGSAAATAACAGAAACCAACA	240
Qy	241	CTGCCGGTTGATTTCTTTTGCTCCACTGCGGTATGGGTTACTTGGGCTCGGTTTCAGAA	300
Db	241	CTGCCGGTTGATTTCTTTTGCTCACTGCGGTATGGGTTACTTGGGCTCGGTTTCAGAA	300

Qy		301	TACACCTACTTTTGCAAATGGGGGAAGATAAATTGATAAACGACTTCGAAGAGCTTGAGGCC	360
Db		301	TACACCTACTTTTGCAAATGGGGGAAGATAAATTGATAAACGACTTCGAAGAGCTTGAGGCC	360
Qy		361	CGGCATTTCTATGACACTGACATGCAGATGACTGTGTAGGTTTTAGAACCCTTGTTGGTTGAG	420
Db		361	CGGCATTTCTATGACACTGACATGCAGATGACTGTGTAGGTTTTAGAACCCTTGTTGGTTGAG	420
Qy		421	CCGTGGATTGCTGGCACTCTGGCCAGGCCCTCAGAAAACAATTTTAGGTCAAGCAGAGACAA	480
Db		421	CCGTGGATTGCTGGCACTCTGGCCAGGCCCTCAGAAAACAATTTTAGGTCAAGCAGAGACAA	480
Qy		481	GAGAGATAAGTGGCGCACTCCGGTGGCATCACCTGCGATCCTTTGAGGACAGACCTTTGTG	540
Db		481	GAGAGATAAGTGGCGCACTCCGGTGGCATCACCTGCGATCCTTTGAGGACAGACCTTTGTG	540
Qy		541	AAGTCAGAGCTGTCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600
Db		541	AAGTCAGAGCTGTCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600
Qy		601	AGAAAGGATTTCTGAGGTTTTGAAGCAAAATGCGAGTGAAACAGAACCAATCCAATGTTGTA	660
Db		601	AGAAAGGATTTCTGAGGTTTTGAAGCAAAATGCGAGTGAAACAGAACCAATCCAATGTTGTA	660
Qy		661	ATTCAAGCACTTTGAGTCCCTCACATTTACCCTGTTCCGTACCCCACCTCTCACAAAGCCTCTCTG	720
Db		661	ATTCAAGCACTTTGAGTCCCTCACATTTACCCTGTTCCGTACCCCACCTCTCACAAAGCCTCTCTG	720
Qy		721	AATATTCCTGGTTTTACCCCCAGAAATATTTACAGGTACATCTGCAGGAGTCTCTTGCCAG	780
Db		721	AATATTCCTGGTTTTACCCCCAGAAATATTTACAGGTACATCTGCAGGAGTCTCTTGCCAG	780
Qy		781	GAGAAAGCCAAGTATCTGTGACTTTCAGCAGATCCAGTCTTTCAGTGCCAAATTCCAAAG	840
Db		781	GAGAAAGCCAAGTATCTGTGACTTTCAGCAGATCCAGTCTTTCAGTGCCAAATTCCAAAG	840
Qy		841	GCAGTTCCAACTTACTACGAATGATGCCATAAAAAACCACTCTGCTGGTAGAATTTGGACATT	900
Db		841	GCAGTTCCAACTTACTACGAATGATGCCATAAAAAACCACTCTGCTGGTAGAATTTGGACATT	900
Qy		901	TCAAATACAGACTTTTCTATCAGCTGGAGATGCCTTTCAGCGTGATCTGCCCTAACAGT	960
Db		901	TCAAATACAGACTTTTCTATCAGCTGGAGATGCCTTTCAGCGTGATCTGCCCTAACAGT	960
Qy		961	GATTCAGAGTACAAAGCCTTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGCACTGC	1020
Db		961	GATTCAGAGTACAAAGCCTTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGCACTGC	1020
Qy		1021	GTCCTTTTGAATAAAGGCGAGACACAAAGAAAGAGAGCTACCTTTACCCAGCATATA	1080
Db		1021	GTCCTTTTGAATAAAGGCGAGACACAAAGAAAGAGAGCTACCTTTACCCAGCATATA	1080
Qy		1081	CCTCGGGATGTTCTCTCCAGTTCATTTTACCTTGGTGCTCTGAAATCCGAGCAATTCCT	1140
Db		1081	CCTCGGGATGTTCTCTCCAGTTCATTTTACCTTGGTGCTCTGAAATCCGAGCAATTCCT	1140
Qy		1141	AAAAAGGCATTTTTGCGAGCCCTTGTGGACTATACCAAGTACAGTGTGTAAGAGCGCAGG	1200
Db		1141	AAAAAGGCATTTTTGCGAGCCCTTGTGGACTATATACCAAGTACAGTGTGTAAGAGCGCAGG	1200
Qy		1201	CTACAGGAGCTGTCCAGTAAACAGGGGCGAGCCGATTTATAGCGCTTTGTACGAGATGCC	1260
Db		1201	CTACAGGAGCTGTCCAGTAAACAGGGGCGAGCCGATTTATAGCGCTTTGTACGAGATGCC	1260
Qy		1261	TGTGCTGCTTGTGTTGGATCTCCTCCTCGCTTTTCCCTTTCTTGCCAGGCCACCACTCAGTCTC	1320
Db		1261	TGTGCTGCTTGTGTTGGATCTCCTCCTCGCTTTTCCCTTTCTTGCCAGGCCACCACTCAGTCTC	1320
Qy		1321	CTGCTCGAACATCTTCTCTAAACTTCAACCCAGACCAATATTCTGTGTGCAAGCTCAAGTTTA	1380
Db		1321	CTGCTCGAACATCTTCTCTAAACTTCAACCCAGACCAATATTCTGTGTGCAAGCTCAAGTTTA	1380

QY 1381 TTTCCAGGAGGAGCTCCATTTTGTCTTCAACATTGTGGAATTTCTGTCTACTGCCACA 1440
Db 1381 TTTCCAGGAGGAGCTCCATTTTGTCTTCAACATTGTGGAATTTCTGTCTACTGCCACA 1440
QY 1441 ACAGAGGTTCTGCGAAGGGAGTATGTACAGCTGGCTGGCTTGTGTTGCTTTCAGTT 1500
Db 1441 ACAGAGGTTCTGCGAAGGGAGTATGTACAGCTGGCTGGCTTGTGTTGCTTTCAGTT 1500
QY 1501 CTTCCAGCAAAACATACATGCTCCATGAAGACAGCGGGAAAGCCCTGGCTCTTAAGATA 1560
Db 1501 CTTCCAGCAAAACATACATGCTCCATGAAGACAGCGGGAAAGCCCTGGCTCTTAAGATA 1560
QY 1561 TCCATCTCTCTCGNACAAACAAATTTTCCATTTACAGATGAGCCCTCAATCCCATC 1620
Db 1561 TCCATCTCTCTCGNACAAACAAATTTTCCATTTACAGATGAGCCCTCAATCCCATC 1620
QY 1621 ATATGTGGGTCCAGGAACCGGCATACCGCTTTATTTGGGTCTCTACACATAGAGAG 1680
Db 1621 ATATGTGGGTCCAGGAACCGGCATACCGCTTTATTTGGGTCTCTACACATAGAGAG 1680
QY 1681 AAATCCAAAGAACCAACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1740
Db 1681 AAATCCAAAGAACCAACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1740
QY 1741 AGGCAATAGGATAGGATATTTCTATTAGAAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
Db 1741 AGGCAATAGGATAGGATATTTCTATTAGAAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
QY 1801 ATCTTAAGTATGAGGTTTCTCTCAGAGATGCTCTGTTGGGAGGAGGAGGCC 1860
Db 1801 ATCTTAAGTATGAGGTTTCTCTCAGAGATGCTCTGTTGGGAGGAGGAGGCC 1860
QY 1861 CCAGCAAGTATGACAGAACCAATCCAGCTTCATGGCCAGAGGTGGCGAGATCTC 1920
Db 1861 CCAGCAAGTATGACAGAACCAATCCAGCTTCATGGCCAGAGGTGGCGAGATCTC 1920
QY 1921 CTCAGAGAACGGCCATATTTATGTGTGGAGATGCAAGATATGGCCAAAGATGA 1980
Db 1921 CTCAGAGAACGGCCATATTTATGTGTGGAGATGCAAGATATGGCCAAAGATGA 1980
QY 1981 CATGATGCCCTGTGCAATATTAAGCAAGAGGTGGAGTTGAAACTAGAGCAATG 2040
Db 1981 CATGATGCCCTGTGCAATATTAAGCAAGAGGTGGAGTTGAAACTAGAGCAATG 2040
QY 2041 AAAACCTGGCCACTTTTAAAGAGAAAAGCGCTTACCTTCAGGATATTTGGTCATAA 2097
Db 2041 AAAACCTGGCCACTTTTAAAGAGAAAAGCGCTTACCTTCAGGATATTTGGTCATAA 2097

RESULT 4
US-11-119-096-1
; Sequence 1, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16

; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-1

Query Match 99.9%; Score 2095.4; DB 26; Length 2097;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 ATGAGGAGGTTCTGTTACTATATGCTACAGAGGAGCAGGCAAGGCCATCGCAGAA 60
Db 1 ATGAGGAGGTTCTGTTACTATATGCTACAGAGGAGCAGGCAAGGCCATCGCAGAA 60
QY 61 GAAATGTGTGAGCAAGCTGTGTACATGGAATTTCTGCAGATCTTCACTGATTAGTGA 120
Db 61 GAAATGTGTGAGCAAGCTGTGTACATGGAATTTCTGCAGATCTTCACTGATTAGTGA 120
QY 121 TCCGATAAGTATGACCTTAAACAAACCGAACAGCTCTCTTGTGTGTGTGTCTACCA 180
Db 121 TCCGATAAGTATGACCTTAAACAAACCGAACAGCTCTCTTGTGTGTGTGTCTACCA 180
QY 181 GGCAACCGAGACCCCAACCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAA 240
Db 181 GGCAACCGAGACCCCAACCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAA 240
QY 241 CTGCGGTTGATTTCTTGTCTACCTGGGTATGGGTACTGGGTCTCGGTGATTGAA 300
Db 241 CTGCGGTTGATTTCTTGTCTACCTGGGTATGGGTACTGGGTCTCGGTGATTGAA 300
QY 301 TACACCTACTTTTGCATGGGGGAAGATAATTATATAAAGCACTTCAAGAGCTTGGAG 360
Db 301 TACACCTACTTTTGCATGGGGGAAGATAATTATATAAAGCACTTCAAGAGCTTGGAG 360
QY 361 CGGCAATTTATGACATGCGACATGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 420
Db 361 CGGCAATTTATGACATGCGACATGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 420
QY 421 CCGTGGATGCTGACCTCTGCGGAGCTTCAAGAGCAATTTTAGTCAAGCAGAGGACA 480
Db 421 CCGTGGATGCTGACCTCTGCGGAGCTTCAAGAGCAATTTTAGTCAAGCAGAGGACA 480
QY 481 GAGGAGATAGTGGCGCACTCCCGGTGGCATCACTTGCATCTTGGAGGACAGACTTGT 540
Db 481 GAGGAGATAGTGGCGCACTCCCGGTGGCATCACTTGCATCTTGGAGGACAGACTTGT 540
QY 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCCAGCTTCTGAGATTCGATTCAGGA 600
Db 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCCAGCTTCTGAGATTCGATTCAGGA 600
QY 601 AGAAGGATTCGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGA 660
Db 601 AGAAGGATTCGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGA 660
QY 661 ATTGAAGACTTTGAGTCTCTCACTTACCGTTTGGGTACCCCACTCTCAAGCCTCTCT 720
Db 661 ATTGAAGACTTTGAGTCTCTCACTTACCGTTTGGGTACCCCACTCTCAAGCCTCTCT 720
QY 721 AATATTCCTGTTTACCCCAAGATAATTTACAGGTATCATCTGAGGAGTCTCTTGGCC 780
Db 721 AATATTCCTGTTTACCCCAAGATAATTTACAGGTATCATCTGAGGAGTCTCTTGGCC 780
QY 781 GAGGAAAGCCCAAGTATCTGTGACTTCAGGAGATCCAGTTTTCAGTGCCCAATTCAG 840
Db 781 GAGGAAAGCCCAAGTATCTGTGACTTCAGGAGATCCAGTTTTCAGTGCCCAATTCAG 840
QY 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTGGACAT 900
Db 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTGGACAT 900
QY 901 TCNAATACAGACTTTTCTCTATCAGCCTGGAGATGCTTTCAGCGTGATCTGCCCTAAC 960

Db 901 TCANATACAGACTTTCTCTATCAGCTGGAGATGCCCTTACGGTGAATCTGCCCTAAACAGT 960
Qy 961 GATTCTGAGGTACAAAGCCTACTCAAGAAGCTGAGCTTGAAGATAAAGAGAGAGACTGC 1020
Db 961 GATTCTGAGGTACAAAGCCTACTCAAGAAGCTGAGCTTGAAGATAAAGAGAGAGACTGC 1020
Qy 1021 GTCCCTTTGAAAATAAAGGCGAGACACAAGAGAAAGGAGTACTCTTACCCCGACATATA 1080
Db 1021 GTCCCTTTGAAAATAAAGGCGAGACACAAGAGAAAGGAGTACTCTTACCCCGACATATA 1080
Qy 1081 CCTCGGGAGTCTCTCCAGTTCATTTTAACTCGGTCTTGAATCCGAGCAATTCCT 1140
Db 1081 CCTCGGGAGTCTCTCCAGTTCATTTTAACTCGGTCTTGAATCCGAGCAATTCCT 1140
Qy 1141 AAAAAGGCAATTTTGGAGCCCTTGTGAGCATATACCAAGTACAGTGTCTGAAAAGCGCAGG 1200
Db 1141 AAAAAGGCAATTTTGGAGCCCTTGTGAGCATATACCAAGTACAGTGTCTGAAAAGCGCAGG 1200
Qy 1201 CTACAGGAGCTGCAGTAAACAGGGGCGAGCGCATATATAGCCGCTTGTACGAGATGCC 1260
Db 1201 CTACAGGAGCTGCAGTAAACAGGGGCGAGCGCATATATAGCCGCTTGTACGAGATGCC 1260
Qy 1261 TGTGCTGCTTGTGGATCTCCTCTCGCTTTCCTTCTTCCAGCCACCACTCAGTCTC 1320
Db 1261 TGTGCTGCTTGTGGATCTCCTCTCGCTTTCCTTCTTCCAGCCACCACTCAGTCTC 1320
Qy 1321 CTGTCGGAACATCTTCTTAACTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1321 CTGTCGGAACATCTTCTTAACTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Qy 1381 TTTTACCAGAAAGCTCCATTTGTCTTCAACATTTGGAATTTCTGTCTACTGCCACA 1440
Db 1381 TTTTACCAGAAAGCTCCATTTGTCTTCAACATTTGGAATTTCTGTCTACTGCCACA 1440
Qy 1441 ACAGAGGTTCTCGGGAAGGAGTAGTACAGGCTGGCTGGCTTGTGGTTCCTTCAGTT 1500
Db 1441 ACAGAGGTTCTCGGGAAGGAGTAGTACAGGCTGGCTGGCTTGTGGTTCCTTCAGTT 1500
Qy 1501 CTTCAGCAAAACATACATGCAATCCATGAAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1560
Db 1501 CTTCAGCAAAACATACATGCAATCCATGAAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1560
Qy 1561 TCCATCTCTCGACAAACAAATTTCTTCCACTTACCAGATGACCCCTCAATCCCCATC 1620
Db 1561 TCCATCTCTCGACAAACAAATTTCTTCCACTTACCAGATGACCCCTCAATCCCCATC 1620
Qy 1621 ATAATGTTGGTTCAGGAACCGGCATAGCCCGCTTTATTTGGGTTTCTTACAAACATAGAG 1680
Db 1621 ATAATGTTGGTTCAGGAACCGGCATAGCCCGCTTTATTTGGGTTTCTTACAAACATAGAG 1680
Qy 1681 AAATCCAAAGAACAAACACCCAGATGGAAATTTTGGAGCAATTTGGCTGTC 1740
Db 1681 AAATCCAAAGAACAAACACCCAGATGGAAATTTTGGAGCAATTTGGCTGTC 1740
Qy 1741 AGGCATAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1800
Db 1741 AGGCATAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1800
Qy 1801 ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGGAGGAGGAAGCC 1860
Db 1801 ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGGAGGAGGAAGCC 1860
Qy 1861 CCAGCAAAAGTATGTAACAAGAACATCCAGCTTTCATGGCCAGCAGGTGGCGAGATCTCT 1920
Db 1861 CCAGCAAAAGTATGTAACAAGAACATCCAGCTTTCATGGCCAGCAGGTGGCGAGATCTCT 1920
Qy 1921 CTCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAAAGATGTA 1980
Db 1921 CTCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAAAGATGTA 1980
Qy 1981 CATGATGCCCTTGTGCAAAATAATAGCAAAAGAGTTGGAGTTGAAAACCTAGAAAGCAATG 2040

Db 1981 CATGATGCCCTTGTGCAAAATAATAAGCAAAAGAGGTTGGAGTTGAAAACCTAGAAAGCAATG 2040
Qy 2041 AAAACCTTGGCCACTTTTAAAGAGAAAGAAAGCGCTACCTTCAGGATATTTGGTCAATA 2097
Db 2041 AAAACCTTGGCCACTTTTAAAGAGAAAGAAAGCGCTACCTTCAGGATATTTGGTCAATA 2097
RESULT 5
US-09-371-347-24
; Sequence 24, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR FILING DATE: 1998-01-16, 622
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-24
Query Match 99.9%; Score 2095.4; DB 10; Length 3259;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1 ATGAGGAGGTTTCTGTCTACTATATGCTACAGCAGGGACAGGCAAAAGGCCATCGCAGAA 60
Db 80 ATGAGGAGGTTTCTGTCTACTATATGCTACAGCAGGGACAGGCAAAAGGCCATCGCAGAA 139
Qy 61 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTATTAGTGAA 120
Db 140 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTATTAGTGAA 199
Qy 121 TCCGATAGTATGACCTTAAACCCGAAACAGTCTCTTGTGTTGTGTTCTTACACAG 180
Db 200 TCCGATAGTATGACCTTAAACCCGAAACAGTCTCTTGTGTTGTGTTCTTACACAG 259
Qy 181 GGCAACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 260 GGCAACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 319
Qy 241 CTGCGGTTGATTTCTTTGCTCCTGCGGTATGGGTTTACCTGGGTCTCGGTGATTCAGAA 300
Db 320 CTGCGGTTGATTTCTTTGCTCCTGCGGTATGGGTTTACCTGGGTCTCGGTGATTCAGAA 379
Qy 301 TACACCTACTTTTCCAAATGGGGGAAGATATTGATAAACGACTTCAAGAGCTTGGAGCC 360
Db 380 TACACCTACTTTTCCAAATGGGGGAAGATATTGATAAACGACTTCAAGAGCTTGGAGCC 439
Qy 361 CGGATTTCTATGACACTGGACATGCATGCTGTAGGTTTGTAGAACTTTGTGGTTGAG 420
Db 440 CGGATTTCTATGACACTGGACATGCATGCTGTAGGTTTGTAGAACTTTGTGGTTGAG 499
Qy 421 CCGTGGATGCTGAGCTCTGGCCAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA 480
Db 500 CCGTGGATGCTGAGCTCTGGCCAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA 559
Qy 481 GAGGATTAAGTGGGCACTCCCGGTGGCATCACTGTCATCTTGGAGCAGACCTTGTG 540
Db 560 GAGGATTAAGTGGGCACTCCCGGTGGCATCACTGTCATCTTGGAGCAGACCTTGTG 619
Qy 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATTCAGGA 600

Db 620 AAGTCAGAGCTGCTACACATTGAACTCAAGTCGAGCTTCTGAGATTGATGATTCAGGA 679
Qy 601 AGAAGAGATTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCATGTTGTA 660
Db 680 AGAAGAGATTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCATGTTGTA 739
Qy 661 ATTGAAGACTTTGAGTCCCTCACTTACCGTTGCGTACCCCACTCTCAAGCCCTCTCTG 720
Db 740 ATTGAAGACTTTGAGTCCCTCACTTACCGTTGCGTACCCCACTCTCAAGCCCTCTCTG 799
Qy 721 AATATTCTCTGGTTTACCCCAAGAAATATTTACAGGTACATCTGCAAGAGTCTCTGCGCAG 780
Db 800 AATATTCTCTGGTTTACCCCAAGAAATATTTACAGGTACATCTGCAAGAGTCTCTGCGCAG 859
Qy 781 GAGGAAGCAAGTATCTGTGACTTTCAGCAGATCCAGTCTTTTCAAGTGCCAAATTTCAAAG 840
Db 860 GAGGAAGCAAGTATCTGTGACTTTCAGCAGATCCAGTCTTTTCAAGTGCCAAATTTCAAAG 919
Qy 841 GCAGTTCAACTTACTACGAATGATCCATAAAACCACTCTGCTGCTGAGATTCGACATT 900
Db 920 GCAGTTCAACTTACTACGAATGATCCATAAAACCACTCTGCTGCTGAGATTCGACATT 979
Qy 901 TCAATACAGACTTTTCTCTATCAGCTCGAGATGCTTTCAGCGTGATCTGCCCTTAACAGT 960
Db 980 TCAATACAGACTTTTCTCTATCAGCTCGAGATGCTTTCAGCGTGATCTGCCCTTAACAGT 1039
Qy 961 GATTCGAGGTACAAAGCTACTCCAAAGACTGCAAGTCTTGAAGTAAAGAGAGACTGTC 1020
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Qy 1021 GTCCCTTTTGAATTAAGGCAGACACAAAGAAAGAGAGCTTACCTTACCCAGCATATA 1080
Db 1100 GTCCCTTTTGAATTAAGGCAGACACAAAGAAAGAGAGCTTACCTTACCCAGCATATA 1159
Qy 1081 CTTGCGGAGTGTCTCTCAGTTCATTTTACCTGCTGCTTGAATTCGAGCAATTCCT 1140
Db 1160 CTTGCGGAGTGTCTCTCAGTTCATTTTACCTGCTGCTTGAATTCGAGCAATTCCT 1219
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Db 1220 AAAAGGCAATTTTTCGAGCCCTTGTGACTATACAGTGACAGTGTCTGAAAGGCGAGG 1279
Qy 1201 CTACAGGAGCTGTGAGTAAACAAAGGCGAGCGGATTTAGCCGCTTTGTACGAGATGCC 1260
Db 1280 CTACAGGAGCTGTGAGTAAACAAAGGCGAGCGGATTTAGCCGCTTTGTACGAGATGCC 1339
Qy 1261 TGTGCTGCTGTTGAGTCTCTCTCTGCTTTTCTGCTGCGCCACCACTCAGTCTC 1320
Db 1340 TGTGCTGCTGTTGAGTCTCTCTCTGCTTTTCTGCTGCGCCACCACTCAGTCTC 1399
Qy 1321 CTGCTCGAACATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1400 CTGCTCGAACATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1459
Qy 1381 TTTACCCAGGAAGCTCCTTTGCTTCTCAACATTTGGAATTTCTGTCTACTGCCACA 1440
Db 1460 TTTACCCAGGAAGCTCCTTTGCTTCTCAACATTTGGAATTTCTGTCTACTGCCACA 1519
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Db 1520 ACAGAGGTTCTGCGGAAGGAGTATGTACAGGCTGCTGCGCTTCTGTTGCTTTCAGTT 1579
Qy 1501 CTTACGCCAAAATACATGATCCCATGAAGACAGCGGGAAGCCCTGCTCTTAAGATA 1560
Db 1580 CTTACGCCAAAATACATGATCCCATGAAGACAGCGGGAAGCCCTGCTCTTAAGATA 1639
Qy 1561 TCCATCTCTCTCGAAACAAATTTCTTTTCACTTACAGATGACCCCTCAATTCGCCATC 1620
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Qy 1681 AAACCTCCAGAACCAACACCCAGATGGAATTTTGGAGCAATGTGTTGTTTTGGCTGC 1740
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Db 1940 CCAGCAAAAGTATGTACAAGACAAATCCAGCTTCAATGCCCAGAGCTGCGAGAAATCTCTC 1999
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Db 2060 CATGATGCCCTTGTGCAAAATTAAGCAAGAGGTTGGAGTTGAAAAAAGTAAAGCAATG 2119
Qy 2041 AAAACCTTGGCCACTTTTAAAAAGAAAGAAACGCTTACCTTTCAGGATATTTGGTCTATA 2097
Db 2120 AAAACCTTGGCCACTTTTAAAAAGAAAGAAACGCTTACCTTTCAGGATATTTGGTCTATA 2176

RESULT 6

US-10-450-763-874
; Sequence 874, Application US/10450763
; Publication No. US20050196754A1
; GENERAL INFORMATION:
; APPLICANT: Hyseq, Inc
; TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
; FILE REFERENCE: 790CIEP3/US
; CURRENT APPLICATION NUMBER: US/10/450,763
; CURRENT FILING DATE: 2003-06-11
; PRIOR APPLICATION NUMBER: PCT/US01/08631
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/540,217
; PRIOR FILING DATE: 2000-03-31
; PRIOR APPLICATION NUMBER: 09/649,167
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 60736
; SOFTWARE: Custom
; SEQ ID NO 874
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SIMILAR
; LOCATION: (80)..(2173)
; OTHER INFORMATION: 100% homologous to Homo sapiens methionine synthase
; OTHER INFORMATION: reductase, accession number AF025794, Smith-Waterman Score=3624.
US-10-450-763-874

Query Match 99.9%; Score 2095.4; DB 24; Length 3259;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGAGGAGGCAAGGCAAGGCGCATCCGACAA 60
Db 80 ATGAGGAGGTTTCTGTTACTATATGCTACAGAGGAGGCAAGGCGCATCCGACAA 139
Qy 61 GAAATGTGTGAGCAAGCTGTGATGATGATTTTCTGAGATCTTCACTATTAGTGAA 120
Db 140 GAAATGTGTGAGCAAGCTGTGATGATGATTTTCTGAGATCTTCACTATTAGTGAA 199
Qy 121 TCCGATATGATGACCTTAAACCCGAAACAGCTCTCTTGTGTTGTTCTTACCAAG 180

Db 200 TCCGATAGTATGACCTAAAAACCGAAACAGCTCTCTTTGTTGTTGTTCTTACCACG 259
Qy 181 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 260 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 319
Qy 241 CTGCGGTTGATTCTTTCTGCTCACCTGGGTATGGGTTACTGGGTCTCGGTGATTAGAA 300
Db 320 CTGCGGTTGATTCTTTCTGCTCACCTGGGTATGGGTTACTGGGTCTCGGTGATTAGAA 379
Qy 301 TACACCTACTTTTGCATTTGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTTGGAGCC 360
Db 380 TACACCTACTTTTGCATTTGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTTGGAGCC 439
Qy 361 CGGATTTCTATGACACTGGACATGCGAGATGACTGTGTAGTTTGAACCTTTGGTTGAG 420
Db 440 CGGATTTCTATGACACTGGACATGCGAGATGACTGTGTAGTTTGAACCTTTGGTTGAG 499
Qy 421 CCCTGGATTGCTGGACTCTGCCAGCCCTCAGAAGCAATTTTAGTCAAGCAGAGGACAA 480
Db 500 CCGTGGATTGCTGGACTCTGCCAGCCCTCAGAAGCAATTTTAGTCAAGCAGAGGACAA 559
Qy 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGCATCTTTGAGGACAGACCTTTGTG 540
Db 560 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGCATCTTTGAGGACAGACCTTTGTG 619
Qy 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGAGCTTCTGAGATTCGATGATTCAGGA 600
Db 620 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGAGCTTCTGAGATTCGATGATTCAGGA 679
Qy 601 AGAAGGATTCTGAGTTTGAAGCAAAATCGAGTGAACAGCAACCAATCCAAATGTTGTA 660
Db 680 AGAAGGATTCTGAGTTTGAAGCAAAATCGAGTGAACAGCAACCAATCCAAATGTTGTA 739
Qy 661 ATTGAAGACTTTGAGTCTCTCACTTACCCTGTTGGTACCCCACTCTCAAGCCCTCTCTG 720
Db 740 ATTGAAGACTTTGAGTCTCTCACTTACCCTGTTGGTACCCCACTCTCAAGCCCTCTCTG 799
Qy 721 AATATCTCTGTTTACCCCAAGATATTTACAGGTACATCTGCGAGGATCTCTGGCCAG 780
Db 800 AATATCTCTGTTTACCCCAAGATATTTACAGGTACATCTGCGAGGATCTCTGGCCAG 859
Qy 781 GAGGAAGCCAAAGTATCTGCACTTCAGCAGATCCAGTTTTTCAAGTCCCAATTTCAAAG 840
Db 860 GAGGAAGCCAAAGTATCTGCACTTCAGCAGATCCAGTTTTTCAAGTCCCAATTTCAAAG 919
Qy 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTGAATTTGACATT 900
Db 920 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTGAATTTGACATT 979
Qy 901 TCAATACAGACTTTTCTCTCAGTTCATTTTACCTGGATGCTTACGGGTGATCTGCCCTAACAGT 960
Db 980 TCAATACAGACTTTTCTCTCAGTTCATTTTACCTGGATGCTTACGGGTGATCTGCCCTAACAGT 1039
Qy 961 GATTCGAGGTACAAAGCCCTACTCAAAGACTGCAAGTTGAAGATAAAGAGAGACCTGC 1020
Db 1040 GATTCGAGGTACAAAGCCCTACTCAAAGACTGCAAGTTGAAGATAAAGAGAGACCTGC 1099
Qy 1021 GTCTCTTTTGAATAAAGCGACACAAAGAGAAAGGAGCTTACCTTACCCAGCATATA 1080
Db 1100 GTCTCTTTTGAATAAAGCGACACAAAGAGAAAGGAGCTTACCTTACCCAGCATATA 1159
Qy 1081 CCTGGGATGTTCTCTCAGTTCAATTTTACCTGGTCTTGAATTCGAGCAATTCCT 1140
Db 1160 CCTGGGATGTTCTCTCAGTTCAATTTTACCTGGTCTTGAATTCGAGCAATTCCT 1219
Qy 1141 AAAAGGCAATTTTTCGAGCCCTCTGCACTATACAGTGAAGTGCCTGAAAGCGCAGG 1200
Db 1220 AAAAGGCAATTTTTCGAGCCCTCTGCACTATACAGTGAAGTGCCTGAAAGCGCAGG 1279
Qy 1201 CTACAGGAGCTGTGCAAGTAAACAAAGGGCGAGCCGATATAGCCGCTTTGTACGAGATGCC 1260
Db 1280 CTACAGGAGCTGTGCAAGTAAACAAAGGGCGAGCCGATATAGCCGCTTTGTACGAGATGCC 1339

Qy 1261 TGTGCTGCTGTTGTTGATCTCCTCCTCGCTTTCCCTTCTTGGCAGCCACCACTCAGTCTC 1320
Db 1340 TGTGCTGCTGTTGTTGATCTCCTCCTCGCTTTCCCTTCTTGGCAGCCACCACTCAGTCTC 1399
Qy 1321 CTGCTCGAAACATCTTCTCTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1400 CTGCTCGAAACATCTTCTCTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1459
Qy 1381 TTTTCCACGAAAGCTTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
Db 1460 TTTTCCACGAAAGCTTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1519
Qy 1441 ACAGAGTTCCTGCGGAAGGAGTATGTACAGGCTGGCTGGCTTGTGTTGTTCTTCAGTT 1500
Db 1520 ACAGAGTTCCTGCGGAAGGAGTATGTACAGGCTGGCTGGCTTGTGTTGTTCTTCAGTT 1579
Qy 1501 CTTTCCAGCAAAACATATCATATCCATGAAGACAGCGGAAAGCCCTGGCTTCTTAAGATA 1560
Db 1580 CTTTCCAGCAAAACATATCATATCCATGAAGACAGCGGAAAGCCCTGGCTTCTTAAGATA 1639
Qy 1561 TCCATCTCTCTCGAAACAAATTTCTTCCATTTACAGATGACCCCTCAATCCCAATC 1620
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Db 1700 ATATGCTGGTTCAGGAACCGCATAGCCCGTTTATTTGGGTTCTTCAACATAGAGAG 1759
Qy 1681 AAATCCCAAGAAACACCCAGATGGAAATTTTGGAGCAATGTGTTGTTTGGCTGC 1740
Db 1760 AAATCCCAAGAAACACCCAGATGGAAATTTTGGAGCAATGTGTTGTTTGGCTGC 1819
Qy 1741 AGGCAATAGGATAGGATTTATCTATTGAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
Db 1820 AGGCAATAGGATAGGATTTATCTATTGAGAAAGAGCTCAGACATTTCTTAAAGCATGG 1879
Qy 1801 ATCTTAACTCATCTAAAGTTTCTCTCTCAAGAGATGCTCTGTTGGGAGAGGAAGCC 1860
Db 1880 ATCTTAACTCATCTAAAGTTTCTCTCTCAAGAGATGCTCTGTTGGGAGAGGAAGCC 1939
Qy 1861 CCAGCAAAAGTATGTACAGAACCAACATCCAGCTTTCATGSCCAGAGGTTGGCAGATCCTC 1920
Db 1940 CCAGCAAAAGTATGTACAGAACCAACATCCAGCTTTCATGSCCAGAGGTTGGCAGATCCTC 1999
Qy 1921 CTCAGAGAAACGGCCATATTTATGTGTGTGAGATGCAAAAGATATGGCCCAAGATGTA 1980
Db 2000 CTCAGAGAAACGGCCATATTTATGTGTGTGAGATGCAAAAGATATGGCCCAAGATGTA 2059
Qy 1981 CATGATGCCCTTGTGCAAAATTAAGCAAAAGAGTTGGAGTTGAAAACTAGAGCAATG 2040
Db 2060 CATGATGCCCTTGTGCAAAATTAAGCAAAAGAGTTGGAGTTGAAAACTAGAGCAATG 2119
Qy 2041 AAAACCCCTGGCCACTTTTAAAAAGAAAAACGCTACCTTTCAGGATATTTGGTCATAA 2097
Db 2120 AAAACCCCTGGCCACTTTTAAAAAGAAAAACGCTACCTTTCAGGATATTTGGTCATAA 2176

RESULT 7

US-11-119-096-24
; Sequence 24, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE.
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096


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; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-24

Query Match      99.9%; Score 2095.4; DB 26; Length 3259;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2096; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Qy 80 ATGAGGAGGTTCTGTACTATATGCTACACAGGAGGACAGGCAAGGCCATCGCAGAA 139
Db      |||
Qy 61 GAAATGTGTGAGCAAGCTGTGTATACATGATTTCTGCAGATCTTCACTATATTAGTAA 120
Db      |||
Qy 140 GAAATGTGTGAGCAAGCTGTGTATACATGATTTCTGCAGATCTTCACTATATTAGTAA 199
Db      |||
Qy 121 TCCGATATAGTATGACTTAAACCCGACAGCAGCTCTCTGTGTGTGTGTCTTACACAG 180
Db      |||
Qy 200 TCCGATATAGTATGACTTAAACCCGACAGCAGCTCTCTGTGTGTGTGTCTTACACAG 259
Db      |||
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Db      |||
Qy 260 GGCACCGGAGACCCACCGGACAGCAGCCGCAAGTTGTTAAGAAATACAGAACCAACA 319
Db      |||
Qy 241 CTGCGGTTGATTTCTTTCTCCTCCTGCGGTATGCGGTACTGGGTCTCGGTGATTAGAA 300
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Qy 380 TACACTACTTTTGAATGGGGGGAAGATTAATGATTAACGACTTCAAGAGCTTGGAGCC 439
Db      |||
Qy 361 CGGCATTTCTATGACACTGGACATCAGATGACTGTGTAGGTTTATAGAACTTGTGTTGAG 420
Db      |||
Qy 440 CGGCATTTCTATGACACTGGACATCAGATGACTGTGTAGGTTTATAGAACTTGTGTTGAG 499
Db      |||
Qy 421 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTATAGGTCAAGCAGAGCAAA 480
Db      |||
Qy 500 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTATAGGTCAAGCAGAGCAAA 559
Db      |||
Qy 481 GAGGAGATAAGTGGGCGACTCCCGGTGGCATCACCTGATCCTTGGAGCAGACCTTGTG 540
Db      |||
Qy 560 GAGGAGATAAGTGGGCGACTCCCGGTGGCATCACCTGATCCTTGGAGCAGACCTTGTG 619
Db      |||
Qy 541 AAGTCAGAGCTCTACACATTTGAATCTCAAGTCAGAGCTTCTGAGATTTCGATGATTTCGGA 600
Db      |||
Qy 620 AAGTCAGAGCTCTACACATTTGAATCTCAAGTCAGAGCTTCTGAGATTTCGATGATTTCGGA 679
Db      |||
Qy 601 AGAAAGGATTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 660
Db      |||
Qy 680 AGAAAGGATTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 739
Db      |||
Qy 661 ATTGAAGATTCTGAGTCTCACTTACCGGTTCGGTACCGGCTCTCTCAAGCCCTCTCTG 720
Db      |||
Qy 740 ATTGAAGATTCTGAGTCTCACTTACCGGTTCGGTACCGGCTCTCTCAAGCCCTCTCTG 799
Db      |||
Qy 721 ATATTCTCTGTTTACCCCAATTTTACAGGTACATCTGACAGGACTCTCTTGGCCAG 780
Db      |||
Qy 800 AATATTCTCTGTTTACCCCAATTTTACAGGTACATCTGACAGGAGTCTCTTGGCCAG 859
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Qy 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTCTTTTCAAGTGCCCAATTTCAAAG 840
Db      |||
Qy 860 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTCTTTTCAAGTGCCCAATTTCAAAG 919
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Qy 1160 CCTCGGGGATGTTCTCTCAGTTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1219
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Qy 1220 AAAAAGGCAATTTTTCGAGCCCTTGTGAGCTTATACAGTGAAGTGTGAAAGGCGAGG 1279
Db      |||
Qy 1201 CTACAGAGCTGTCAGCTTAAACAGGGGAGCCGATTTATAGCCGCTTGTGACGAGATGCC 1260
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Qy 1261 TGTGCTGCTTGTGTGGATCTCTCTGCTTTCCTTTCCTCCAGCACCACCTCAGTCTC 1320
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Qy 1321 CTGCTCGAAACATCTTCTTAAACCTTCAACCCAGACATATTCGTGTGCAAGCTCAAGTTTA 1380
Db      |||
Qy 1400 CTGCTCGAAACATCTTCTTAAACCTTCAACCCAGACATATTCGTGTGCAAGCTCAAGTTTA 1459
Db      |||
Qy 1381 TTTTCAACCCAGGAAAGCTTCTTCAACATTTGGAATTTCTGCTTACTGCCCCA 1440
Db      |||
Qy 1460 TTTTCAACCCAGGAAAGCTTCTTCAACATTTGGAATTTCTGCTTACTGCCCCA 1519
Db      |||
Qy 1441 ACAGAGGTTCTGCGGAAAGGAGTATGTACAGCTTGGCTGGCTTGTGTTGCTTCACTT 1500
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Qy 1520 ACAGAGGTTCTGCGGAAAGGAGTATGTACAGCTTGGCTGGCTTGTGTTGCTTCACTT 1579
Db      |||
Qy 1501 CTTCAGCCAAACATACATGCTCCATGAAGACAGCGGGAAGCCCTGGCTCCTTAAGATA 1560
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Db      |||
Qy 1561 TCCATCTCTCTCGAACAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCCATC 1620
Db      |||
Qy 1640 TCCATCTCTCTCGAACAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCCATC 1699
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Qy 1621 ATATATGTTGGGTTCAGGAAACCGGCATAGCCCGCTTATTTGGGTTCTTACAAACATAGAGAG 1680
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Qy 1700 ATATATGTTGGGTTCAGGAAACCGGCATAGCCCGCTTATTTGGGTTCTTACAAACATAGAGAG 1759
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Qy 1681 AAATCTCAAGAAACAAACCCAGATGGAATTTTGGAGCAATTTGAGCAATTTGTTGGCTGC 1740
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Qy 1760 AAATCTCAAGAAACAAACCCAGATGGAATTTTGGAGCAATTTGAGCAATTTGTTGGCTGC 1819
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Qy 1741 AGGCATAGGATAGGATTTATCTTATCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1800
Db      |||
Qy 1820 AGGCATAGGATAGGATTTATCTTATCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1879
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Qy 1801 ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCCTGTTGGGAGAGAGGAAGCC 1860
Db      |||
Qy 1880 ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCCTGTTGGGAGAGAGGAAGCC 1939
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Qy 1861 CCAGCAAGTATGTACAAGACAAACATCCAGCTTTCATGGCCAGCAGGTGGCGAGAAATCTCTC 1920
Db      |||
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Db 1940 CCAGCAAGTATGTACAAACAACATCCAGCTTCATGSCCAGCAGGTGGCGAGAAATCCTC 1999
Qy 1921 CTCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATATGCGCAAGATGTA 1980
Db 2000 CTCAGGAGAAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGCGCAAGATGTA 2059
Qy 1981 CATGATGCCCTTGTGCAAAATAATAGCAAAAGAGGTGGAGTTGAAAACTAGAGCAATG 2040
Db 2060 CATGATGCCCTTGTGCAAAATAATAGCAAAAGAGGTGGAGTTGAAAACTAGAGCAATG 2119
Qy 2041 AAAACCCCTGGCCACTTTAAAAAGAGAAACCGCTACCTTCCAGGATATTTGGTGCATAA 2097
Db 2120 AAAACCCCTGGCCACTTTAAAAAGAGAAACCGCTACCTTCCAGGATATTTGGTGCATAA 2176

RESULT 8
US-09-371-347-41
; Sequence 41, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-41

Query Match 99.8%; Score 2093.8; DB 10; Length 2097;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 2095; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 ATGAGGAGTTCTGTTACTATATGCTACAGAGGACAGGCAAGGCCATCGCAGAA 60
Db 1 ATGAGGAGTTCTGTTACTATATGCTACAGAGGACAGGCAAGGCCATCGCAGAA 60
Qy 61 GAAATGTGTAGCAAGCTGTGTACATGGATTTCTGCAGATCTTCACTATATTAGTGAA 120
Db 61 GAAATGTGTAGCAAGCTGTGTACATGGATTTCTGCAGATCTTCACTATATTAGTGAA 120
Qy 121 TCCGATAAGTATGACCTAAAACCGAAACAGCTCCTCTTGTGTGTGTGTCTTACCAACG 180
Db 121 TCCGATAAGTATGACCTAAAACCGAAACAGCTCCTCTTGTGTGTGTGTCTTACCAACG 180
Qy 181 GGCACCGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 181 GGCACCGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Qy 241 CTGCGGTTGATTTCTTTGCTCACCTGCGGTATGGGTACTGGGTCTCGGTGATTTCAGAA 300
Db 241 CTGCGGTTGATTTCTTTGCTCACCTGCGGTATGGGTACTGGGTCTCGGTGATTTCAGAA 300
Qy 301 TACACCTACTTTTGCATTTGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC 360
Db 301 TACACCTACTTTTGCATTTGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC 360
Qy 361 CGGCATTTCTATGACACTGGACATGCATGACTGTGTAGTTTGAACCTTGTGGTTGAG 420
Db 361 CGGCATTTCTATGACACTGGACATGCATGACTGTGTAGTTTGAACCTTGTGGTTGAG 420
Qy 421 CCGTGGATTGTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGACAA 480
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Db 421 CCGTGGATTGTGGACTCTGGCCAGCCCTCAGAAAGCATTTAGTCAAGCAGAGGACAA 480
Qy 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGCATCCTTTGAGGACAGACCTTGTG 540
Db 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACCTGCATCCTTTGAGGACAGACCTTGTG 540
Qy 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGCTTCTGAGATTCGATGATTCAGGA 600
Db 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGCTTCTGAGATTCGATGATTCAGGA 600
Qy 601 AGAAAGGATTCTGAGGTTTTGAAGCAAAATGCAAGCAAGCAACCAATCCAATGTTGTA 660
Db 601 AGAAAGGATTCTGAGGTTTTGAAGCAAAATGCAAGCAAGCAACCAATCCAATGTTGTA 660
Qy 661 ATTGAAGACTTTGAGTCTCTCACTTACCCTTCCGTTCCGTTACCCCACTCTCAAGCCCTCTG 720
Db 661 ATTGAAGACTTTGAGTCTCTCACTTACCCTTCCGTTCCGTTACCCCACTCTCAAGCCCTCTG 720
Qy 721 AATATTCCTGTTTACCCCCAGAAATATTACAGGTACATCTGCAGGAGTCTCTTTGGCCAG 780
Db 721 AATATTCCTGTTTACCCCCAGAAATATTACAGGTACATCTGCAGGAGTCTCTTTGGCCAG 780
Qy 781 GAGGAAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCCAATTTCAAAG 840
Db 781 GAGGAAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCCAATTTCAAAG 840
Qy 841 GCAGTTCAACTTACTAGATGATGCCATAAAACCACTCTGCTGGTAGAATTCGACATTT 900
Db 841 GCAGTTCAACTTACTAGATGATGCCATAAAACCACTCTGCTGGTAGAATTTGGACATTT 900
Qy 901 TCAATAACAGACTTTTCTTATCAGCCTGGAGATGCTTCAAGCTGATCTGCGCTTAAACAGT 960
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Qy 961 GATTCTGAGGTACAAAGCCTACTCCAAGAGCTGCAGCTTGAAGATAAAAGAGACACTGC 1020
Db 961 GATTCTGAGGTACAAAGCCTACTCCAAGAGCTGCAGCTTGAAGATAAAAGAGACACTGC 1020
Qy 1021 GTCTTTTGAATAAAAGGCGACACAAAGAAAGAGAGCTACTTACCCAGCATATA 1080
Db 1021 GTCTTTTGAATAAAAGGCGACACAAAGAAAGAGAGCTACTTACCCAGCATATA 1080
Qy 1081 CCTCGGGATGTTCTCTCCAGTTCAATTTTACCTGCTGTTGAAATCCGAGCAATTCCT 1140
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Db 1141 AAAAAGGCATTTTTGCGAGCCCTTGTGGACTATATACCAGTGACAGTGTGAAAAGCGCAGG 1200
Qy 1201 CTACAGAGCTGTGCAGTAAACAAAGGGCGACCGGATTTATAGCCGCTTTGTACGAGATGCC 1260
Db 1201 CTACAGAGCTGTGCAGTAAACAAAGGGCGACCGGATTTATAGCCGCTTTGTACGAGATGCC 1260
Qy 1261 TGTGCTGCTGTTGGATCTCCTCCTCGCTTCCCTTCTTCCAGCCACCACTCAGTCTC 1320
Db 1261 TGTGCTGCTGTTGGATCTCCTCCTCGCTTCCCTTCTTCCAGCCACCACTCAGTCTC 1320
Qy 1321 CTGCTCGAAACATCTTCCCTAACTTCAACCCAGACCATATTCGTTGCAAGCTCAAGTTTA 1380
Db 1321 CTGCTCGAAACATCTTCCCTAACTTCAACCCAGACCATATTCGTTGCAAGCTCAAGTTTA 1380
Qy 1381 TTTTCCACCGAAAGCTCCATTTTGTCTTCAACATTTGTGGAAATTTCTGTCTACTGCCACA 1440
Db 1381 TTTTCCACCGAAAGCTCCATTTTGTCTTCAACATTTGTGGAAATTTCTGTCTACTGCCACA 1440
Qy 1441 ACAGAGTTCTGCGGAGGAGTATGACAGCTGGCTGGCTTGGTTGGTTGCTTCAGTT 1500
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Qy 1501 CTTTCCAGCCAAACATACATGATCCCATGAAGACAGCGGAAAGCCCTGGCTCTTAAGATA 1560
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Db 1501 CTTGAGCCAAACATACATGTCATCCCATGAAGACAGCGGAAAGCCCTCGCTCCTAAGATA 1560
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Db 1561 TCCATCTCTCTCGAACAAACAAATCTTTTTCACATTTACAGATGACCCCTCAATCCCAATC 1620
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Qy 1681 AAATCCCAAGAACACACCCAGATGGAATTTTGGAGCAATGTGGTTGTTTGGCTGC 1740
Db 1681 AAATCCCAAGAACACACCCAGATGGAATTTTGGAGCAATGTGGTTGTTTGGCTGC 1740
Qy 1741 AGGCATAAGGATAGGGAATATCTATTAGAAAAAGAGCTCAGACATTTCTTTAAGCATGGG 1800
Db 1741 AGGCATAAGGATAGGGAATATCTATTAGAAAAAGAGCTCAGACATTTCTTTAAGCATGGG 1800
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Db 1801 ATCTTAATCTCATTAAGGTTTCTTCTCAAGAGATGCTCTGTGGGAGGAGGAAGCC 1860
Qy 1861 CCAGCAATGATGTACAGACAAACATCCAGCTTCATGGCCAGCAGGTGGCGAGATCCTC 1920
Db 1861 CCAGCAATGATGTACAGACAAACATCCAGCTTCATGGCCAGCAGGTGGCGAGATCCTC 1920
Qy 1921 CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGCCCCAAGATGTA 1980
Db 1921 CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGCCCCAAGATGTA 1980
Qy 1981 CATGATGCCCTTGTGCAAAATATTAAGCAAAAGAGGTTGGAGTTGAAAACTAGAAAGCAATG 2040
Db 1981 CATGATGCCCTTGTGCAAAATATTAAGCAAAAGAGGTTGGAGTTGAAAACTAGAAAGCAATG 2040
Qy 2041 AAAACCTGGCCACTTTAAAGAGAAAAAAGCGTACCTTCAGGATATTTGGTCAATA 2097
Db 2041 AAAACCTGGCCACTTTAAAGAGAAAAAAGCGTACCTTCAGGATATTTGGTCAATA 2097

RESULT 9
US-11-119-096-41
; Sequence 41; Application US/111119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-41

Query Match 99.8%; Score 2093.8; DB 26; Length 2097;
Best Local Similarity 99.9%; Pred. No. 0;

Matches 2095; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1 ATGAGGAGGTTCTGTTTACTATATGCTACAGCAGGACAGCAAGAGGCGCATCGCAGAA 60
Db 1 ATGAGGAGGTTCTGTTTACTATATGCTACAGCAGGACAGCAAGAGGCGCATCGCAGAA 60
Qy 61 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTGAGATCTTCACTATATTAGTGAA 120
Db 61 GAAATATGTGAGCAAGCTGTGGTACATGGATTTTCTGAGATCTTCACTATATTAGTGAA 120
Qy 121 TCCGATATGATGATGCTTAAACACGAAACAGCTCTCTTGTGTTGTTGTTTCTTACCAAG 180
Db 121 TCCGATATGATGATGCTTAAACACGAAACAGCTCTCTTGTGTTGTTGTTTCTTACCAAG 180
Qy 181 GGACCCGAGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGGAAATACAGAACCAACA 240
Db 181 GGACCCGAGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGGAAATACAGAACCAACA 240
Qy 241 CTGCGGTTGATTTCTTGTCTCACCCTGGGTATGGGTATCTGGGTCTCGGTGATTCAGAA 300
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Qy 301 TACACCTACTTTTCAATGGGGGAAGTAATTTGATATAACGACTTCAAGAGCTTGGAGCC 360
Db 301 TACACCTACTTTTCAATGGGGGAAGTAATTTGATATAACGACTTCAAGAGCTTGGAGCC 360
Qy 361 CGGCATTTCTATGACATCTGAGATGACTGTGTAGGTTTGTAGAACTTTGTGGTTGAG 420
Db 361 CGGCATTTCTATGACATCTGACATGACATGCTGTAGGTTTGTAGAACTTTGTGGTTGAG 420
Qy 421 CCCTGGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGGTCAAGCAGAGGACAA 480
Db 421 CCCTGGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGGTCAAGCAGAGGACAA 480
Qy 481 GAGGAGATTAAGTGGCGCACTCCCGGTGGCATCACTGCTGATCTTTGAGGACAGACCTTGTG 540
Db 481 GAGGAGATTAAGTGGCGCACTCCCGGTGGCATCACTGCTGATCTTTGAGGACAGACCTTGTG 540
Qy 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGACTCTGAGATTCGATGATTTCAGGA 600
Db 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGACTCTGAGATTCGATGATTTCAGGA 600
Qy 601 AGAAAGGATTTGAGGTTTGAAGCAAAATGCACTGCAACAGCAACCAATCCAAATGTTGTA 660
Db 601 AGAAAGGATTTGAGGTTTGAAGCAAAATGCACTGCAACAGCAACCAATCCAAATGTTGTA 660
Qy 661 ATTGAAGACTTTGAGTCTCTCACTTACCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 720
Db 661 ATTGAAGACTTTGAGTCTCTCACTTACCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 720
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Qy 841 GCAGTTCACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTGGAGATTTGGACATT 900
Db 841 GCAGTTCACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTGGAGATTTGGACATT 900
Qy 901 TCAATACAGACTTTTCTTATCAGCCCTGGAGATGCTTTCAGCGTATCTGCTGCTTAAACAGT 960
Db 901 TCAATACAGACTTTTCTTATCAGCCCTGGAGATGCTTTCAGCGTATCTGCTGCTTAAACAGT 960
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Qy 1021 GTCTCTTTTGAATAAAGGAGGACACAAAGAAAGAGAGCTACTTACCCAGCATATA 1080
Db 1021 GTCTCTTTTGAATAAAGGAGGACACAAAGAAAGAGAGCTACTTACCCAGCATATA 1080

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Db |
1081 CCTGGGATGTTCTCTCCAGTTCATTTTACCTGGTGTCTTGAAATCCGAGCAATTCCT 1140
Qy |
1141 AAAAAGGCAATTTTGGAGCCCTTGTGGCATATACCAAGTACAGTGTCTGAAAGCGCAGG 1200
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Qy |
1201 CTACAGAGCTGTGCGAGTAACAAGGGGCGAGCCGATATATAGCCCTTTGTACGAGATGCC 1260
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1201 CTACAGAGCTGTGCGAGTAACAAGGGGCGAGCCGATATATAGCCCTTTGTACGAGATGCC 1260
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1261 TGTGCTGCTGTTGGATCTCCTCTGCTTTCCTCTTCCAGCCAGCACTCAGTCTC 1320
Qy |
1321 CTGCTCGAACATCTTCTCTAACTTCAACCCAGAGCCATATTCGTGTGCAAGCTCAAGTTTA 1380
Db |
1381 TTTCAACCAGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
Qy |
1381 TTTCAACCAGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
Db |
1441 ACAGAGTTCTGCGAAGGGAGTATGACAGGCTGGCTGGCTTGTGGTTGCTTCAGTT 1500
Qy |
1441 ACAGAGTTCTGCGAAGGGAGTATGACAGGCTGGCTGGCTTGTGGTTGCTTCAGTT 1500
Db |
1501 CTTCAGCAAAACATACATGATCCATCCAGAGCCAGTATTCGTGTGCAAGCTCAAGTTTA 1560
Qy |
1501 CTTCAGCAAAACATACATGATCCATCCAGAGCCAGTATTCGTGTGCAAGCTCAAGTTTA 1560
Db |
1561 TCCATCTCTCTGAAACAACTTTCTTCACTTACAGATGACCCCTCAATCCCATC 1620
Qy |
1561 TCCATCTCTCTGAAACAACTTTCTTCACTTACAGATGACCCCTCAATCCCATC 1620
Db |
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Qy |
1621 ATAATGTGGGTTCAGGAACCGGATAGCCCGCTTTATTTGGTTTCTTCAACATAGAGAG 1680
Db |
1681 AAATCTCAAGAACACACCCAGATGGAATTTTGGAGCAATGTGGTTTGGTCTG 1740
Qy |
1681 AAATCTCAAGAACACACCCAGATGGAATTTTGGAGCAATGTGGTTTGGTCTG 1740
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1741 AGGATATAGGATAGGATATCTATTAGAAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
Qy |
1741 AGGATATAGGATAGGATATCTATTAGAAAAGAGCTCAGACATTTCTTAAAGCATGG 1800
Db |
1801 ATCTTAATCTATCTAAAGGTTTCTCTCAAGAGATGCTCTGTTGGGGAGGAGAGCC 1860
Qy |
1801 ATCTTAATCTATCTAAAGGTTTCTCTCAAGAGATGCTCTGTTGGGGAGGAGAGCC 1860
Db |
1861 CCAGCAAGTATGTACAGAACAACTCAGCTTTCATGGCCAGCAGGTGGCAGAAATCCTC 1920
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1861 CCAGCAAGTATGTACAGAACAACTCAGCTTTCATGGCCAGCAGGTGGCAGAAATCCTC 1920
Db |
1921 CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGATATATGGCCAAAGATGTA 1980
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1921 CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGATATATGGCCAAAGATGTA 1980
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1981 CATGATGCCCTTGTGCAAAATATAGCAAGAGGTTGGAGTTGAAAACCTAGAGCAATG 2040
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1981 CATGATGCCCTTGTGCAAAATATAGCAAGAGGTTGGAGTTGAAAACCTAGAGCAATG 2040
Db |
2041 AAAACCTGGCCACTTTAAAAGAGAAAACCGTACCTTCAGGATATTTGGTCATAA 2097
Qy |
2041 AAAACCTGGCCACTTTAAAAGAGAAAACCGTACCTTCAGGATATTTGGTCATAA 2097
Db |

; Publication No. US20050026169A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: C1001499
; CURRENT APPLICATION NUMBER: US/10741.600
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 73997
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 692
; LENGTH: 3256
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-741-600-692

Query Match 99.5%; Score 2087; DB 22; Length 3256;
Best Local Similarity 99.0%; Pred. No. 0;
Matches 2075; Conservative 21; Mismatches 1; Indels 0; Gaps 0;
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94 ATGAGGAGGTTTCTGTTACTATATGCTACACAGGAGGAGCAAGGCCATCGCAGAA 153
Qy | 61 GAAATGTGTGAGCAAGCTGTGGTACATGGAATTTTCTGCAGATCTTCACTATATTAGTGA 120
Db | |
154 GAAATGTGTGAGCAAGCTGTGGTACATGGAATTTTCTGCAGATCTTCACTGATTAGTGA 213
Qy | 121 TCCGATTAAGTATGACCTTAAACCCGAAACAGCTCCTCTTGTGTGTGTGTTCACACG 180
Db | |
214 TCCGATTAAGTATGACCTTAAACCCGAAACAGCTCCTCTTGTGTGTGTGTTCACACG 273
Qy | 181 GGACCCGAGAGCCACCCGACACAGCCGCAAGTTTCTTAAGGAAATACAGAACCAACA 240
Db | |
274 GGACCCGAGAGCCACCCGACACAGCCGCAAGTTTCTTAAGGAAATACAGAACCAACA 333
Qy | 241 CTGCGGTTGATTTCTTTGCTCACCTCGGTTATGGGTTACTCGGTTCTCGGTTGATTAGAA 300
Db | |
334 CTGCGGTTGATTTCTTTGCTCACCTCGGTTATGGGTTACTCGGTTCTCGGTTGATTAGAA 393
Qy | 301 TACACCTACTTTTGCATATGGGGGAAAGATTAATGATTAACGACTTCAAGAGCTTGGAGCC 360
Db | |
394 TACACCTACTTTTGCATATGGGGGAAAGATTAATGATTAACGACTTCAAGAGCTTGGAGCC 453
Qy | 361 CGGATTTCTATGACATCTGGACATGACATGCTGTGTAGTGTGTAGTGTGTGTGTGTGAG 420
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454 CGGATTTCTATGACATCTGGACATGACATGCTGTGTAGTGTGTGTGTGTGTGTGTGTGAG 513
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Qy | 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATACCTCGATCCTTTGAGAGCAGACCTTGTG 540
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574 GAGGAGATAAGTGGCGCACTCCCGGTGGCATACCTCGATCCTTTGAGAGCAGACCTTGTG 633
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694 AGAAAGATTTCTGAGGTTTGAAGCAAAATGCAGTGAACAGCAACCAATCAATGTTGTA 753
Qy | 661 ATTGAAGATTTTGTAGTCTCTCACTTACCGGTTGGTACCCCACTCTCAAGAGCTTCTGT 720
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754 ATTGAAGATTTTGTAGTCTCTCACTTACCGGTTGGTACCCCACTCTCAAGAGCTTCTGT 813
Qy | 721 AATATTTCTGTTTACCCCAAGATATTTACAGGTACATCTGAGGAGTCTTCTGGCCAG 780
Db | |
814 AATATTTCTGTTTACCCCAAGATATTTACAGGTACATCTGAGGAGTCTTCTGGCCAG 873
Qy | 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTGTTCAGTGTCCCAATTTCAAAG 840

Qy 541 AAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTTCAGGA 600
Db 652 AAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTTCAGGA 711
Qy 601 AGAAGGATTCCTGAGGTTTGAAGCAAAATGCAGTGAACAGCAACCAATCCAATGTTGTA 660
Db 712 AGAAGGATTCCTGAGGTTTGAAGCAAAATGCAGTGAACAGCAACCAATCCAATGTTGTA 771
Qy 661 ATTGAAGACTTTGAGTCTCTACTTAACCGTTTCGGTACCCCACTCTCAAGAGCTCTCTG 720
Db 772 ATTGAAGACTTTGAGTCTCTACTTAACCGTTTCGGTACCCCACTCTCAAGAGCTCTCTG 831
Qy 721 AATATTCTCTGTTTACCCCAAGATATTTACAGGTACATCTGAGGAGTCTCTTGGCCAG 780
Db 832 AATATTCTCTGTTTACCCCAAGATATTTACAGGTACATCTGAGGAGTCTCTTGGCCAG 891
Qy 781 GAGGAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTCTTCAAGTGCCCAATTTCAAG 840
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Db 1432 CTGCTCGAACATCTTCTCTAAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1491
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Db 1492 TTTCAACCCAGGAAGCTCCAATTTGTCTTCAACATTTGTGGAATTTCTCTACTGCGACA 1551
Qy 1441 ACAGAGGTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGCTTGTGTTGCTTCAGTT 1500
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Qy 1501 CTTGAGCCAAACATACATGCAATCCCATGAAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1560
Db 1612 CTTGAGCCAAACATACATGCAATCCCATGAAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1671
Qy 1561 TCCATCTCTCTCGAACAACAAATTTCTTTTCACTTACAGATGACCCCTCAATCCCAATC 1620
Db 1672 TCCATCTCTCTCGAACAACAAATTTCTTTTCACTTACAGATGACCCCTCAATCCCAATC 1731

Qy 1621 ATAATGTGGTTCAGGAACCGGCATAGCCCGTTTATTGGGTTCTCTACAACATAGAG 1680
Db 1732 ATAATGTGGTTCAGGAACCGGCATAGCCCGTTTATTGGGTTCTCTACAACATAGAG 1791
Qy 1681 AAATCTCAAGAACCAACACCCAGATGGAAATTTTGGAGCAATGTGGTTGTTTGGCTGC 1740
Db 1792 AAATCTCAAGAACCAACACCCAGATGGAAATTTTGGAGCAATGTGGTTGTTTGGCTGC 1851
Qy 1741 AGGATAAGATAGGATTAATCTATTCAAGAAAGAGCTCAGACATTTCTTAAGCATGG 1800
Db 1852 AGGATAAGATAGGATTAATCTATTCAAGAAAGAGCTCAGACATTTCTTAAGCATGG 1911
Qy 1801 ATCTTAATCTCATCTAAAGGTTTCTCTCAAGAGATCTCTCTTGGGAGAGGAAAGCC 1860
Db 1912 ATCTTAATCTCATCTAAAGGTTTCTCTCAAGAGATCTCTCTTGGGAGAGGAAAGCC 1971
Qy 1861 CCAGCAAAAGTATGTACAAAGCAACATCCAGCTTCATGGCCAGCAGGTGGCGAGATCCTC 1920
Db 1972 CCAGCAAAAGTATGTACAAAGCAACATCCAGCTTCATGGCCAGCAGGTGGCGAGATCCTC 2031
Qy 1921 CTCAGGAGAACCGCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAAAGATGTA 1980
Db 2032 CTCAGGAGAACCGCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAAAGATGTA 2091
Qy 1981 CATGATCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACCTAGAAAGCAATG 2040
Db 2092 CATGATCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACCTAGAAAGCAATG 2151
Qy 2041 AAAACCTGCGCACTTTTAAAGAAAGAAAACGCTTACCTTCAGGATATTTGGTCAATA 2097
Db 2152 AAAACCTGCGCACTTTTAAAGAAAGAAAACGCTTACCTTCAGGATATTTGGTCAATA 2208

RESULT 12
US-09-371-347-45
; Sequence 45, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 45
; LENGTH: 2094
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-45

Query Match 99.2%; Score 2079.4; DB 10; Length 2094;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 1; Indels 3; Gaps 1;
Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGAGCAGCAAGGCGCATCGCAGAA 60
Db 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGAGCAGCAAGGCGCATCGCAGAA 60
Qy 61 GAAATGTGTGAGCAAGCTGTGGTACATGATTTTCTGCAGATCTTCACTATATTAGTAA 120
Db 61 GAAATGTGTGAGCAAGCTGTGGTACATGATTTTCTGCAGATCTTCACTATATTAGTAA 120
Qy 121 TCCGATAAGTATGACCTTAAACCCGAAACAGCTCTCTTGTGTGTGTGTCTTACCAAG 180
Db 121 TCCGATAAGTATGACCTTAAACCCGAAACAGCTCTCTTGTGTGTGTGTCTTACCAAG 180

;; PRIOR FILING DATE: 2000-01-19
;; PRIOR APPLICATION NUMBER: 09/371,347
;; PRIOR FILING DATE: 1999-08-10
;; PRIOR APPLICATION NUMBER: 09/232,028
;; PRIOR FILING DATE: 1999-01-15
;; PRIOR APPLICATION NUMBER: 60/071,622
;; PRIOR FILING DATE: 1998-01-16
;; NUMBER OF SEQ ID NOS: 63
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 45
;; LENGTH: 2094
;; TYPE: DNA
;; ORGANISM: Homo sapiens
US-11-119-096-45

Query Match 99.2%; Score 2079.4; DB 26; Length 2094;

Best Local Similarity 99.8%; Pred. No. 0;

Matches 2093; Conservative 0; Mismatches 1; Indels 3; Gaps 1;

Qy	1	ATGAGGAGTTTCTGTTACTATATGCTACAGAGGAGACAGGCAAGGCCATCGCAGAA	60
Db	1	ATGAGGAGTTTCTGTTACTATATGCTACAGAGGAGACAGGCAAGGCCATCGCAGAA	60
Qy	61	GAATGTGTGAGCAAGCTGTGGTACATGGAATTTCTGCAGATCTTTCACTATTAGTGAA	120
Db	61	GAATGTGTGAGCAAGCTGTGGTACATGGAATTTCTGCAGATCTTTCACTATTAGTGAA	120
Qy	121	TCCGATATGATGACCTTAAACCGAACAAGCTCTCTTTGTTGTTGTTTACCAAG	180
Db	121	TCCGATATGATGACCTTAAACCGAACAAGCTCTCTTTGTTGTTGTTTACCAAG	180
Qy	181	GGCCCGGAGTATGCTTAAACCGAACAAGCTCTCTTTGTTGTTGTTTACCAAG	240
Db	181	GGCCCGGAGTATGCTTAAACCGAACAAGCTCTCTTTGTTGTTGTTTACCAAG	240
Qy	241	CTGCGGTTGATTTCTTTGCTCACTCGGCTATGGGTTACTGGGTTCTCGGTGATTGAAA	300
Db	241	CTGCGGTTGATTTCTTTGCTCACTCGGCTATGGGTTACTGGGTTCTCGGTGATTGAAA	300
Qy	301	TACACCTACTTTTGAATGGGGGAAGATAATTTGATAAACGACTTTCAAGAGCTGGAGCC	360
Db	301	TACACCTACTTTTGAATGGGGGAAGATAATTTGATAAACGACTTTCAAGAGCTGGAGCC	360
Qy	361	CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGTTTGAACCTTTGTTGAG	420
Db	361	CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGTTTGAACCTTTGTTGAG	420
Qy	421	CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGGTCAAGCAGAGGACAA	480
Db	421	CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGGTCAAGCAGAGGACAA	480
Qy	481	GAGGAGATAAGTGGCGCACTCCCGTGGCATCACTCGCATCTTGGAGACAGACCTTGTG	540
Db	481	GAGGAGATAAGTGGCGCACTCCCGTGGCATCACTCGCATCTTGGAGACAGACCTTGTG	540
Qy	541	AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTGAGGA	600
Db	541	AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTGAGGA	600
Qy	601	AGAAAGGATTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA	660
Db	601	AGAAAGGATTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA	660
Qy	661	ATTGAAGACTTTGAGTCTCTACTTACCCGTTGGTACCCCACTCTCAAGCCCTCTGTG	720
Db	661	ATTGAAGACTTTGAGTCTCTACTTACCCGTTGGTACCCCACTCTCAAGCCCTCTGTG	720
Qy	721	AATATCTGTTTACCCCGAGATTTTACAGTACATCTGCAGAGTCTCTTGGCCAG	780
Db	721	AATATCTGTTTACCCCGAGATTTTACAGTACATCTGCAGAGTCTCTTGGCCAG	780
Qy	781	GAGGAAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCCAATTTCAAAG	840
Db	781	GAGGAAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCCAATTTCAAAG	840

Db	781	GAGGAAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCCAATTTCAAAG	840
Qy	841	GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTGCTGGTAGAATTTGGACATT	900
Db	841	GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTGCTGGTAGAATTTGGACATT	900
Qy	901	TCAAATACAGACTTTTCTCTATCAGCCTGGAGATGCCCTTACAGCGTGATCTGCCCTTAACAGT	960
Db	901	TCAAATACAGACTTTTCTCTATCAGCCTGGAGATGCCCTTACAGCGTGATCTGCCCTTAACAGT	960
Qy	961	GATTCTGAGGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGACACTGC	1020
Db	961	GATTCTGAGGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGACACTGC	1020
Qy	1021	GTCTCTTTTGAATAAAGGACAGACAAAGAGAGAGGAGCTACTTTACCCACCATATA	1080
Db	1021	GTCTCTTTTGAATAAAGGACAGACAAAGAGAGAGGAGCTACTTTACCCACCATATA	1080
Qy	1081	CCTCGGGATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT	1140
Db	1081	CCTCGGGATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT	1140
Qy	1141	AAAAAGCATTTTTCGAGCCCTTGTGACTATACAGTGACAGTGTGTGAAAAAGCGCAGG	1200
Db	1141	AAAAAGCATTTTTCGAGCCCTTGTGACTATACAGTGACAGTGTGTGAAAAAGCGCAGG	1200
Qy	1201	CTACAGAGCTGTGCAGTAAACAGGGGCGAGCCGATATAGCCGCTTTGTACGAGATGCC	1260
Db	1201	CTACAGAGCTGTGCAGTAAACAGGGGCGAGCCGATATAGCCGCTTTGTACGAGATGCC	1260
Qy	1261	TGTCCCTGCTTTGTTGGATCTCTCTCGCTTTCCCTTCTTGGCCAGCACCACTCAGTCTC	1320
Db	1261	TGTCCCTGCTTTGTTGGATCTCTCTCGCTTTCCCTTCTTGGCCAGCACCACTCAGTCTC	1320
Qy	1321	CTGCTCGAAACATCTTCTCTAACTTCAACCCAGACCAATATTCGTGTGCAAGCTCAAGTTTA	1380
Db	1321	CTGCTCGAAACATCTTCTCTAACTTCAACCCAGACCAATATTCGTGTGCAAGCTCAAGTTTA	1380
Qy	1381	TTTCCACCGAGAAAGCTCCATTTGTTCTTCAACATTTGGTGGATTTCTGTCTACTGCCACA	1440
Db	1381	TTTCCACCGAGAAAGCTCCATTTGTTCTTCAACATTTGGTGGATTTCTGTCTACTGCCACA	1440
Qy	1441	ACAGAGTTCTCGCGAAGGGAGTATGTACAGCTGGCTGGCTTTGTTGGTTGCTTCAAGTT	1500
Db	1441	ACAGAGTTCTCGCGAAGGGAGTATGTACAGCTGGCTGGCTTTGTTGGTTGCTTCAAGTT	1500
Qy	1501	CTTCAGGCAAAACATACATGCAATCCCATGAAGACAGCGGAAAGCCCTGGCTCTTAAGATA	1560
Db	1501	CTTCAGGCAAAACATACATGCAATCCCATGAAGACAGCGGAAAGCCCTGGCTCTTAAGATA	1560
Qy	1561	TCCATCTCTCTCGAACAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCCATC	1620
Db	1561	TCCATCTCTCTCGAACAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCCATC	1620
Qy	1621	ATAATGTTGGTTCAGGAACCGGATAGCCCGCTTTATTTGGGTTCTTACAAATAGAGAG	1680
Db	1621	ATAATGTTGGTTCAGGAACCGGATAGCCCGCTTTATTTGGGTTCTTACAAATAGAGAG	1680
Qy	1681	AAATCTCAAGAAACACACCCAGATGGAAATTTTGGAGCAATTTGTTGTTGTTGCTGC	1740
Db	1681	AAATCTCAAGAAACACACCCAGATGGAAATTTTGGAGCAATTTGTTGTTGTTGCTGC	1740
Qy	1741	AGGATTAAGATAGGATTTCTATTGAGAAAGAGCTCAGACATTTCTTAAGCATGGG	1800
Db	1741	AGGATTAAGATAGGATTTCTATTGAGAAAGAGCTCAGACATTTCTTAAGCATGGG	1800
Qy	1801	ATCTTAATCTCATATAAGGTTTCTCTTCAAGAGATGCTCTGTTGGGGAGAGAGAGCC	1860
Db	1801	ATCTTAATCTCATATAAGGTTTCTCTTCAAGAGATGCTCTGTTGGGGAGAGAGAGCC	1860
Qy	1861	CCAGCAAGATGTATGTAAGACAAACATCCAGTTTCATGGCCAGAGGTTGGCGAGATCTCTC	1920
Db	1861	CCAGCAAGATGTATGTAAGACAAACATCCAGTTTCATGGCCAGAGGTTGGCGAGATCTCTC	1920

Qy	1921	CTCAGGAGAA	CGGCCATATTTATGTGTGTGGAGATCAAAGAAATATGGCCAAAGGATGTA	1980
Db	1918	CTCAGGAGAA	CGGCCATATTTATGTGTGTGGAGATCAAAGAAATATGGCCAAAGGATGTA	1977
Qy	1981	CATGATGCCCTTGTGC	CAATAATAAAGCAAAGAGGTTGGAGTTGAAAACCTAGAAAGCAATG	2040
Db	1978	CATGATGCCCTTGTGC	CAATAATAAAGCAAAGAGGTTGGAGTTGAAAACCTAGAAAGCAATG	2037
Qy	2041	AAAACCTGGCCACTTTTAA	AGAGAAAAACGCTTACCTTCAGGATATTTGGTCATAA	2097
Db	2038	AAAACCTGGCCACTTTTAA	AGAGAAAAACGCTTACCTTCAGGATATTTGGTCATAA	2094

```

RESULT 14
US-09-371-347-47
; Sequence 47, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: ROY A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371.347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071.622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 47
; LENGTH: 2093
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-47

```

Query Match	99.1%;	Score	2077.4;	DB	10;	Length	2093;		
Best Local	Similarity	99.8%;	Pred. No.	0;					
Matches	209;	Conservative	0;	Mismatches	1;	Indels	4;	Gaps	1;
Qy	1	ATGAGGAGGTTCTGTTACTATATGCTACACAGCGGACAGCCAAAGGCCATCGCAGAA	60						
Db	1	ATGAGGAGGTTCTGTTACTATATGCTACACAGCGGACAGCCAAAGGCCATCGCAGAA	60						
Qy	61	GAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTATATTAGTGAA	120						
Db	61	GAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTGTATTAGTGAA	120						
Qy	121	TCCGATAAGTATGACCTTAAAAACCGAAACAGCTCCTCTTGTGTGTGGTTTCTACCAAG	180						
Db	121	TCCGATAAGTATGACCTTAAAAACCGAAACAGCTCCTCTTGTGTGTGGTTTCTACCAAG	180						
Qy	181	GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA	240						
Db	181	GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA	240						
Qy	241	CTCGCGGTTCATTTCTTTGCTCACTCCGCGTATGGGTTACTTGGGTCTCGGTGATTAGAA	300						
Db	241	CTCGCGGTTCATTTCTTTGCTCACTCCGCGTATGGGTTACTTGGGTCTCGGTGATTAGAA	300						
Qy	301	TACACCTACTTTTGGCAATGGGGGAAGATAAATGATAAAGACCTTCAAGAGCTTGGAGCC	360						
Db	301	TACACCTACTTTTGGCAATGGGGGAAGATAAATGATAAAGACCTTCAAGAGCTTGGAGCC	360						
Qy	361	CGGCATTTCTATGACACTGGACATGACATGCTGTAGTGGTTTAGAACTTGTGGTTGAG	420						
Db	361	CGGCATTTCTATGACACTGGACATGACATGCTGTAGTGGTTTAGAACTTGTGGTTGAG	420						
Qy	421	CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGTCAACGAGAGACAA	480						
Db	421	CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATTTTAGTCAACGAGAGACAA	480						

481	Qy	GAGGAGATAAAGTGGCGCATCTCCGGTGGGCATCACTGCGATCTCTGAGGACAGACCTTGTG	540
481	Db	GAGGAGATAAAGTGGCGCATCTCCGGTGGGCATCACTGCGATCTCTGAGGACAGACCTTGTG	540
541	Qy	AAGTCAAGCTGCTACACAAATGAAATCTCAAGTCGAGCTTCTCGATTTTCGATGATTCGATGATTCAGGA	600
541	Db	AAGTCAAGCTGCTACACAAATGAAATCTCAAGTCGAGCTTCTCGATTTTCGATGATTCGATGATTCAGGA	600
601	Qy	AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAAAACCAATCCAATGTTGTA	660
601	Db	AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAAAACCAATCCAATGTTGTA	660
661	Qy	ATTGAAGACTTTGAGTGCCTCACTTACCCGTTTCGGTACCCCACTCTCACAAGCCTCTCTG	720
661	Db	ATTGAAGACTTTGAGTGCCTCACTTACCCGTTTCGGTACCCCACTCTCACAAGCCTCTCTG	720
721	Qy	AATATTCTCTGGTTTACCCCGCAAAATTTTACAGGTACATCTCGAGGAGTCTCTTGGCCAG	780
721	Db	AATATTCTCTGGTTTACCCCGCAAAATTTTACAGGTACATCTCGAGGAGTCTCTTGGCCAG	780
781	Qy	GAGGAAAGCCAAAGTATCTGTGACTTCAGCAGATCCAGTCTTTCAGGTGCGCAATTTCAAAG	840
781	Db	GAGGAAAGCCAAAGTATCTGTGACTTCAGCAGATCCAGTCTTTCAGGTGCGCAATTTCAAAG	840
841	Qy	GCAGTTCAAATTAACGAATGATGTCATAAAAAACACTCTGCTGGTAGAAATGGACATT	900
841	Db	GCAGTTCAAATTAACGAATGATGTCATAAAAAACACTCTGCTGGTAGAAATGGACATT	900
901	Qy	TCAAAATACAGACTTTTCCCTATCAGCTCGAGATGCTTCAGCGTGATCTGCGCCTAACAGT	960
901	Db	TCAAAATACAGACTTTTCCCTATCAGCTCGAGATGCTTCAGCGTGATCTGCGCCTAACAGT	960
961	Qy	GATTTCTGAGGTCAAAAGCCTACTCCAAAGACTCGAGCTTGAAGATAAAAGAGAGCACTGC	1020
961	Db	GATTTCTGAGGTCAAAAGCCTACTCCAAAGACTCGAGCTTGAAGATAAAAGAGAGCACTGC	1020
1021	Qy	GTCTTTTGAATAAAGGCAGACACAAAGAAAGAGGAGCTACCTTACCCAGCATATA	1080
1021	Db	GTCTTTTGAATAAAGGCAGACACAAAGAAAGAGGAGCTACCTTACCCAGCATATA	1080
1081	Qy	CTTGGGGATGTTCTCTCAGTTTCATTTTACCTGGTGCTTGAATTCGAGGAATTCCT	1140
1081	Db	CTTGGGGATGTTCTCTCAGTTTCATTTTACCTGGTGCTTGAATTCGAGGAATTCCT	1140
1141	Qy	AAAAAGGCATTTTGGAGCCCTTGTGGACTATACCAGTGACAGTGTCTGAAAGGCGCAGG	1200
1141	Db	AAAAAGGCATTTTGGAGCCCTTGTGGACTATACCAGTGACAGTGTCTGAAAGGCGCAGG	1200
1201	Qy	CTACAGGAGCTGTGCAAGTAAACAAAGGGGAGCGGATATAGCCGCTTTGTACGAGATGCC	1260
1201	Db	CTACAGGAGCTGTGCAAGTAAACAAAGGGGAGCGGATATAGCCGCTTTGTACGAGATGCC	1260
1261	Qy	TGTGCTGCTGTTGTGATCTCTCTCGCTTTCCTTCTTGGCGAGCACAACCTCAGTCTC	1320
1261	Db	TGTGCTGCTGTTGTGATCTCTCTCGCTTTCCTTCTTGGCGAGCACAACCTCAGTCTC	1320
1321	Qy	CTGCTCGAACATCTTCCCTAAACCTTCAACCCAGACCATATTCCTGTCGAGCTCAAGTTTA	1380
1321	Db	CTGCTCGAACATCTTCCCTAAACCTTCAACCCAGACCATATTCCTGTCGAGCTCAAGTTTA	1380
1381	Qy	TTTTCACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA	1440
1381	Db	TTTTCACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA	1440
1441	Qy	ACAGAGTTTCTCGGAAGGGAGTAGTACAGGCTGGCTGGCTTGTGTTGTTCTTCAGTT	1500
1441	Db	ACAGAGTTTCTCGGAAGGGAGTAGTACAGGCTGGCTGGCTTGTGTTGTTCTTCAGTT	1500
1501	Qy	CTTCAGCCAAACATACATGCATCCCATGAAAGCAGGGGAAAGCCCTGGCTCCTAAGATA	1560
1501	Db	CTTCAGCCAAACATACATGCATCCCATGAAAGCAGGGGAAAGCCCTGGCTCCTAAGATA	1560

Qy 1561 TCCATCTCTCCTCGAACAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC 1620
Db 1561 TCCATCTCTCCTCGAACAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC 1620
Qy 1621 ATAAATGTTGGTCCAGGAACCGGCATAGCCCGCTTTATTTGGGTTCTTACAACATAGAG 1680
Db 1621 ATAAATGTTGGTCCAGGAACCGGCATAGCCCGCTTTATTTGGGTTCTTACAACAT- - -AG 1676
Qy 1681 AAATCCNAGAACACACCCAGATGGAATTTTGGAGCAATGTTGGTGTCTTTGGCTGC 1740
Db 1677 AAATCCNAGAACACACCCAGATGGAATTTTGGAGCAATGTTGGTGTCTTTGGCTGC 1736
Qy 1741 AGGATAAGGATAGGATATCTATTAGAAAGAGCTCAGACATTTCTTTAAGCATGG 1800
Db 1737 AGGATAAGGATAGGATATCTATTAGAAAGAGCTCAGACATTTCTTTAAGCATGG 1796
Qy 1801 ATCTTAATCTAATAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1860
Db 1797 ATCTTAATCTAATAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1856
Qy 1861 CCAGCAAGATATGACAGAACACATCCAGCTTCAATGGCCAGAGGTGGCGAGATCTC 1920
Db 1857 CCAGCAAGATATGACAGAACACATCCAGCTTCAATGGCCAGAGGTGGCGAGATCTC 1916
Qy 1921 CTCAGGAGAACGGCCATATTTATGTTGTGAGATGCAAGAAATATGGCCAAAGATGTA 1980
Db 1917 CTCAGGAGAACGGCCATATTTATGTTGTGAGATGCAAGAAATATGGCCAAAGATGTA 1976
Qy 1981 CATGATGCCCTTGTGCAATAATAAGCAAGAGGTTGGAGTTGAAAACTAGAAGCAATG 2040
Db 1977 CATGATGCCCTTGTGCAATAATAAGCAAGAGGTTGGAGTTGAAAACTAGAAGCAATG 2036
Qy 2041 AAAACCTGGCCACTTTAAAAGAGAAAAAGCTACCTCAGGATATTTGGTCATAA 2097
Db 2037 AAAACCTGGCCACTTTAAAAGAGAAAAAGCTACCTCAGGATATTTGGTCATAA 2093

RESULT 15

US-11-119-096-47
; Sequence 47, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima,
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 47
; LENGTH: 2093
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-47

Query Match 99.1%; Score 2077.4; DB 26; Length 2093;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2092; Conservative 0; Mismatches 1; Indels 4; Gaps 1;

Qy 1 ATGAGGAGGTTTCTGTACTATATGCTACAGCAGGACAGGAAAAGGCCATCGCAGAA 60
Db 1 ATGAGGAGGTTTCTGTACTATATGCTACAGCAGGACAGGAAAAGGCCATCGCAGAA 60
Qy 61 GAAATGTTGAGCAAGCTGTGGTACATGGATTTTCTCAGATCTTCACTATTATTAGTGAA 120
Db 61 GAAATGTTGAGCAAGCTGTGGTACATGGATTTTCTCAGATCTTCACTATTATTAGTGAA 120
Qy 121 TCCGATTAAGTATGACTTAAAAACCGAAACAGCTCTCTTGTGTTGTTGTTTCTACCAAG 180
Db 121 TCCGATTAAGTATGACTTAAAAACCGAAACAGCTCTCTTGTGTTGTTGTTTCTACCAAG 180
Qy 181 GGACCCGAGACCCACCCGACACAGCCCGAAGTTTGTAAAGGAAATACAGAACCAACA 240
Db 181 GGACCCGAGACCCACCCGACACAGCCCGAAGTTTGTAAAGGAAATACAGAACCAACA 240
Qy 241 CTGCCGTTGATTTTCTGCTCCTCGGTTATGGGTTACTGGGTCTCGGTGATTTCAGAA 300
Db 241 CTGCCGTTGATTTTCTGCTCCTCGGTTATGGGTTACTGGGTCTCGGTGATTTCAGAA 300
Qy 301 TACACCTACTTTTGCATGGGGGAAGATAATTGATAACCGACTTCAAGAGCTTTGGAGCC 360
Db 301 TACACCTACTTTTGCATGGGGGAAGATAATTGATAACCGACTTCAAGAGCTTTGGAGCC 360
Qy 361 CGGCATTTCTATGACACTGACATGACATGCTGTAGGTTTGTAGAACTTTGTTGTTGAG 420
Db 361 CGGCATTTCTATGACACTGACATGACATGCTGTAGGTTTGTAGAACTTTGTTGTTGAG 420
Qy 421 CCCTGGAATGCTGGAATCTGSCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 480
Db 421 CCCTGGAATGCTGGAATCTGSCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 480
Qy 481 GAGGAGATAAGTGGCGCACTCCCGTGGCATCACTGCATCTTGGAGCAGACCTTGTG 540
Db 481 GAGGAGATAAGTGGCGCACTCCCGTGGCATCACTGCATCTTGGAGCAGACCTTGTG 540
Qy 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGGCTTCTGAGATTCGATGATTTCAGGA 600
Db 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGGCTTCTGAGATTCGATGATTTCAGGA 600
Qy 601 AGAAAGGATCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGTA 660
Db 601 AGAAAGGATCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGTA 660
Qy 661 ATTGAAGACTTTGAGTCTCTACATTTACCGTTCCGTTACCCCACTCTCAAGAGCTCTCTG 720
Db 661 ATTGAAGACTTTGAGTCTCTACATTTACCGTTCCGTTACCCCACTCTCAAGAGCTCTCTG 720
Qy 721 AATATTCCTGTTTACCCCAAGATATTTACAGGTACATCTGCAGAGGTCTCTTGGCCAG 780
Db 721 AATATTCCTGTTTACCCCAAGATATTTACAGGTACATCTGCAGAGGTCTCTTGGCCAG 780
Qy 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCTTCAAG 840
Db 781 GAGGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCTTCAAG 840
Qy 841 GCAGTTCAACTTACTACGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 900
Db 841 GCAGTTCAACTTACTACGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 900
Qy 901 TCAAAATACAGACTTTTCTCTATCAGCTGGAGATGCTTTCAGGCTGATCTGCCCTAACAGT 960
Db 901 TCAAAATACAGACTTTTCTCTATCAGCTGGAGATGCTTTCAGGCTGATCTGCCCTAACAGT 960
Qy 961 GATTCTGAGGTACAAAGCCTACTCCTCAAGAGCTGAGCTTGAAGATAAAGAGAGCAGCTGC 1020
Db 961 GATTCTGAGGTACAAAGCCTACTCCTCAAGAGCTGAGCTTGAAGATAAAGAGAGCAGCTGC 1020
Qy 1021 GTCTTTTGAAGATAAAGGAG 1080
Db 1021 GTCTTTTGAAGATAAAGGAG 1080
Qy 1081 CCTCGGAGATGTTCTCTCCAGTTTATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140

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GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: November 8, 2005, 15:42:02 ; Search time 235.42 Seconds
(without alignments)
14554.251 Million cell updates/sec

Title: US-09-371-347A-45
Perfect score: 2094
Sequence: 1 atgaggagggttctgtact.....ttcaggatatattgtcataa 2094

Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents NA.*
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq.*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq.*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq.*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq.*
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq.*
6: /cgn2_6/ptodata/1/ina/backfiles1.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Match	Length	ID	Description
1	2081	99.4	3259	3	US-09-318-448-23
2	2076.2	99.1	3242	4	US-09-949-016-4215
3	386.4	18.5	390	3	US-08-905-223-71
4	380.6	18.2	601	4	US-09-949-016-150019
5	379.4	18.1	35916	4	US-09-949-016-15957
6	379	18.1	601	4	US-09-949-016-150020
7	190.4	9.1	601	4	US-09-949-016-150037
8	188.8	9.0	601	4	US-09-949-016-150047
9	187.2	8.9	601	4	US-09-949-016-150048
10	186.4	8.9	601	4	US-09-949-016-150046
11	174.4	8.3	2475	4	US-09-566-921-88
12	155.2	7.4	601	4	US-09-949-016-150030
13	154.8	7.4	601	4	US-09-949-016-150031
14	130.8	6.2	244	4	US-09-471-276-495
15	128.6	6.1	601	4	US-09-949-016-150007
16	126.2	6.0	601	4	US-09-949-016-150029
17	123.4	5.9	601	4	US-09-949-016-150008
18	123.4	5.9	601	4	US-09-949-016-150055
19	121.4	5.8	601	4	US-09-949-016-150041
20	121.4	5.8	601	4	US-09-949-016-150042
21	99.4	4.7	601	4	US-09-949-016-150032
22	76	3.6	601	4	US-09-949-016-150018
23	58.2	2.8	1863	3	US-09-627-216A-13
24	58.2	2.8	1863	4	US-09-765-873A-13
25	57.8	2.8	1292	4	US-09-270-767-10272
26	57.4	2.7	4353	2	US-08-365-486A-18
27	57.4	2.7	4353	3	US-08-880-342-18

28	57.4	2.7	4780	2	US-08-365-486A-20	Sequence 20, Appl
29	57.4	2.7	4780	3	US-09-123-708-3	Sequence 3, Appl
30	57.4	2.7	4780	3	US-09-123-624-3	Sequence 3, Appl
31	57.4	2.7	4780	3	US-08-880-342-20	Sequence 12, Appl
32	52.6	2.5	5057	2	US-08-365-486A-12	Sequence 20, Appl
33	52.6	2.5	5057	3	US-08-880-342-12	Sequence 12, Appl
34	52.6	2.5	5108	1	US-07-642-002-1	Sequence 1, Appl
35	51.4	2.5	2403	4	US-09-023-655-1226	Sequence 1226, Ap
36	51.4	2.5	4079	4	US-09-016-434-1477	Sequence 1477, Ap
37	50.6	2.4	3150	4	US-10-018-730A-3	Sequence 3, Appl
38	50.4	2.4	13508	4	US-08-956-171E-120	Sequence 120, App
39	50.4	2.4	13508	4	US-08-781-986A-120	Sequence 120, App
40	50.2	2.4	1448	3	US-08-936-165A-113	Sequence 113, App
41	49.4	2.4	1890	3	US-09-134-001C-1557	Sequence 1557, Ap
42	49.2	2.3	1929	4	US-09-543-681A-2997	Sequence 2997, Ap
C 43	49.2	2.3	3155	4	US-09-710-279-3424	Sequence 3424, Ap
C 44	49.2	2.3	4055	4	US-09-710-279-3357	Sequence 3357, Ap
45	47.8	2.3	1887	4	US-09-710-279-2843	Sequence 2843, Ap

ALIGNMENTS

RESULT 1
US-09-318-448-23
; Sequence 23, Application US/09318448
; Patent No. 6210950
; GENERAL INFORMATION:
; APPLICANT: Johnson, William G.
; APPLICANT: Steiroos, Edward S.
; TITLE OF INVENTION: METHODS FOR DIAGNOSING, PREVENTING, AND TREATING
; FILE REFERENCE: 601-1-057
; CURRENT APPLICATION NUMBER: US/09/318,448
; CURRENT FILING DATE: 1999-05-25
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 23
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-318-448-23

Query Match	99.4%	Score 2081;	DB 3;	Length 3259;
Best Local Similarity	99.9%	Pred. No. 0;		
Matches 2094;	Conservative	0;	Mismatches	0;
			Indels	3;
			Gaps	1;
Qy	1	ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA	60	
Db	80	ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA	139	
Qy	61	GAATGTGTGAGCAAGCTGTGTACATGGATTTTCTCAGATCTTCACTGTATTAGTCAA	120	
Db	140	GAATGTGTGAGCAAGCTGTGTACATGGATTTTCTCAGATCTTCACTGTATTAGTCAA	199	
Qy	121	TCCGATAAGTATGACCTAAACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA	240	
Db	200	TCCGATAAGTATGACCTAAACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA	319	
Qy	181	GGCACCAGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA	300	
Db	260	GGCACCAGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA	379	
Qy	241	CTGCGGTTGATTTCTTGTCTCCTCGGTATGGTCTCTGCTCGGTCTCGGTGATTCAGAA	360	
Db	320	CTGCGGTTGATTTCTTGTCTCCTCGGTATGGTCTCTGCTCGGTCTCGGTGATTCAGAA	439	
Qy	301	TACACCTACTTTTGAATGGGGGAGATATTGATAAACCACTTCAAGAGCTTGGAGCC	420	
Db	380	TACACCTACTTTTGAATGGGGGAGATATTGATAAACCACTTCAAGAGCTTGGAGCC		
Qy	361	CGGATTTCTATGACACTGTGACATGCTGTGTAGTTTGTAGAACTTGTGTTGAG		
Db				

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Db 440 CGGCATTCTTATGACACTGGACATGCAGATGACTGTGTAGGTTTAGAACCTTGTGGTTGAG 499
Qy 421 CCCTGGATTGCTGACTCTGCGCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 480
Db 500 CCCTGGATTGCTGACTCTGCGCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 559
Qy 481 GAGGAGATAAGTGGCGCACTCCCGGTGSCATCACTGCATCTCTTGGAGACAGACCTTGTG 540
Db 560 GAGGAGATAAGTGGCGCACTCCCGGTGSCATCACTGCATCTCTTGGAGACAGACCTTGTG 619
Qy 541 AAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTCTGAGATTGATGATTCAGGA 600
Db 620 AAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTCTGAGATTGATGATTCAGGA 679
Qy 601 AGAAGGATTCTGAGGTTTGAAGCAAAATGCACTGACAGCAACCAATCCAAATGTTGTA 660
Db 680 AGAAGGATTCTGAGGTTTGAAGCAAAATGCACTGACAGCAACCAATCCAAATGTTGTA 739
Qy 661 ATTGAAGACTTTGAGTCTCTCACTTACCGGTTCCGGTACCCCCACTCTCACAAGCCTCTCTG 720
Db 740 ATTGAAGACTTTGAGTCTCTCACTTACCGGTTCCGGTACCCCCACTCTCACAAGCCTCTCTG 799
Qy 721 AATATTCTGTGTTTACCCCAAGATAATTTACAGTACATCTGCAGGAGTCTCTTGGCCAG 780
Db 800 AATATTCTGTGTTTACCCCAAGATAATTTACAGTACATCTGCAGGAGTCTCTTGGCCAG 859
Qy 781 GAGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTCAAAG 840
Db 860 GAGAAAGCCAAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCAAATTCAAAG 919
Qy 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCCTCTGCTGGTAGAATTGGACATT 900
Db 920 GCAGTTCAACTTACTACGAATGATGCCATAAAACCCTCTGCTGGTAGAATTGGACATT 979
Qy 901 TCAAAATCAGACTTTTCCCTATCAGCCTGGAGATGCCCTTCAGCGTGATCTGCCCTTAAACAGT 960
Db 980 TCAAAATCAGACTTTTCCCTATCAGCCTGGAGATGCCCTTCAGCGTGATCTGCCCTTAAACAGT 1039
Qy 961 GATTCTGAGGTACAAAGCCTACTCAGAGCTGAGCTTGAAGATAAAGAGAGACTGTC 1020
Db 1040 GATTCTGAGGTACAAAGCCTACTCAGAGCTGAGCTTGAAGATAAAGAGAGACTGTC 1099
Qy 1021 GTCTCTTTTGAATAAAGGCGACACAAAGAAAGAGGAGTACCTTACCCTCCAGCATATA 1080
Db 1100 GTCTCTTTTGAATAAAGGCGACACAAAGAAAGAGGAGTACCTTACCCTCCAGCATATA 1159
Qy 1081 CCTCGGGATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Db 1160 CCTCGGGATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1219
Qy 1141 AAAAAGGCATTTTGGCAGCCCTTGTGGACTATACCACTGACAGTGTCTGAAAAGGCGCAGG 1200
Db 1220 AAAAAGGCATTTTGGCAGCCCTTGTGGACTATACCACTGACAGTGTCTGAAAAGGCGCAGG 1279
Qy 1201 CTACAGGAGCTGTGCAGTAAACAGAGGCGACCGATTATAGCCGTTTGTACGAGATGCC 1260
Db 1280 CTACAGGAGCTGTGCAGTAAACAGAGGCGACCGATTATAGCCGTTTGTACGAGATGCC 1339
Qy 1261 TGTGCTGCTGTTGTTGGATCTCCTCTCGCTTTCCTCTTCCAGCCACCACTCAGTCTC 1320
Db 1340 TGTGCTGCTGTTGTTGGATCTCCTCTCGCTTTCCTCTTCCAGCCACCACTCAGTCTC 1399
Qy 1321 CTGCTCGAACAATCTTCTTAACTTCAACCCAGACCATATTCGTGTGGAAGCTCAAGTTTA 1380
Db 1400 CTGCTCGAACAATCTTCTTAACTTCAACCCAGACCATATTCGTGTGGAAGCTCAAGTTTA 1459
Qy 1381 TTTCAACCCAGGAAGCTCCATTTTGTCTTCAACATTGTGGAATTTCTCTACTTGCCACA 1440
Db 1460 TTTCAACCCAGGAAGCTCCATTTTGTCTTCAACATTGTGGAATTTCTCTACTTGCCACA 1519
Qy 1441 ACAGAGGTTCTCGGGAAGGAGTAGTACAGGCTGGCTGGCTTGTGGTTGCTTCAGTT 1500
Db 1520 ACAGAGGTTCTCGGGAAGGAGTAGTACAGGCTGGCTGGCTTGTGGTTGCTTCAGTT 1579
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Qy 1501 CTTCAGCCAAACATACATGCCATCCCATGAAGACAGCGGGAAGCCCTGGCTCCTTAAGATA 1560
Db 1580 CTTCAGCCAAACATACATGCCATCCCATGAAGACAGCGGGAAGCCCTGGCTCCTTAAGATA 1639
Qy 1561 TCCATCTCTCTCGAACAAACAAATTTCTTCCACTTACCAGATGACCCCTCAATCCCATC 1620
Db 1640 TCCATCTCTCTCGAACAAACAAATTTCTTCCACTTACCAGATGACCCCTCAATCCCATC 1699
Qy 1621 ATAATGTGGTTCAGGAACCGGATAGCCCGTTTATTTGGGTTTCTTACAACTAGAGAG 1680
Db 1700 ATAATGTGGTTCAGGAACCGGATAGCCCGTTTATTTGGGTTTCTTACAACTAGAGAG 1759
Qy 1681 AAATCTCAAGAACAAACACCAGATGGAATTTTGGGCAATGTG--GTTTTTGGGCTGC 1737
Db 1760 AAATCTCAAGAACAAACACCAGATGGAATTTTGGGCAATGTGTTTTTGGGCTGC 1819
Qy 1738 AGGCATAAGGATAGGGAATTTATTTAGAAAAGAGCTCAGACATTTTCTTAAGCATGGG 1797
Db 1820 AGGCATAAGGATAGGGAATTTATTTAGAAAAGAGCTCAGACATTTTCTTAAGCATGGG 1879
Qy 1798 ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCTGTGGGAGGAGGAAGCC 1857
Db 1880 ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCTGTGGGAGGAGGAAGCC 1939
Qy 1858 CCAGCAAGATGTGTACAAAGACAACTCCAGCTTCATGCCAGCAGGTGGCGAGAATCCTC 1917
Db 1940 CCAGCAAGATGTGTACAAAGACAACTCCAGCTTCATGCCAGCAGGTGGCGAGAATCCTC 1999
Qy 1918 CTCAGAGAAACGGCCATATTTATGTGTGGAGATGCAAGAAATATATGGCCAAAGATGTA 1977
Db 2000 CTCAGAGAAACGGCCATATTTATGTGTGGAGATGCAAGAAATATATGGCCAAAGATGTA 2059
Qy 1978 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACTAGAAAGCAATG 2037
Db 2060 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACTAGAAAGCAATG 2119
Qy 2038 AAACCCCTGGCCACTTTTAAAGAGAAACCGCTTACCTTCAGGATATTTGGTCAATA 2094
Db 2120 AAACCCCTGGCCACTTTTAAAGAGAAACCGCTTACCTTCAGGATATTTGGTCAATA 2176
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RESULT 2

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US-09-949-016-4215
; Sequence 4215, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4215
; LENGTH: 3242
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-4215
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Query Match 99.1%; Score 2076.2; DB 4; Length 3242;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 2091; Conservative 0; Mismatches 3; Indels 3; Gaps 1;
Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGAGGAGCAAGGCAATCCAGAA 60
|||||
```


APPLICANT: Lacroix, Bruno
TITLE OF INVENTION: 5' ESTs FOR SECRETED PROTEINS
NUMBER OF SEQUENCES: 503
CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson & Bear
STREET: 501 West Broadway
CITY: San Diego
STATE: California
COUNTRY: USA
ZIP: 92101-3505
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy Disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: Win95
SOFTWARE: Word
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/905,223
FILING DATE:
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Israelsen, Ned A.
REGISTRATION NUMBER: 29,655
REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 235-8550
TELEFAX: (619) 235-0176
INFORMATION FOR SEQ ID NO: 71:
SEQUENCE CHARACTERISTICS:
LENGTH: 390 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: DOUBLE
TOPOLOGY: LINEAR
MOLECULE TYPE: CDNA
ORIGINAL SOURCE:
ORGANISM: Homo Sapiens
TISSUE TYPE: Brain
FEATURE:
NAME/KEY: sig_peptide
LOCATION: 289..357
IDENTIFICATION METHOD: Von Heijne matrix
OTHER INFORMATION: score 6.9
OTHER INFORMATION: seq SLSLASHSVSC/SN

US-08-905-223-71

Query Match 18.5%; Score 386.4; DB 3; Length 390;
Best Local Similarity 99.7%; Pred. No. 3.7e-124;
Matches 387; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 968 AGGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAGAGAGACACTGCGTCCTTT 1027
Db 1 AAGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAGAGAGACACTGCGTCCTTT 60

Qy 1028 TGAATAAAGCGCAGACACAAAGAGAGAGAGCTTACCTTACCCCGACATATACCTGCGG 1087
Db 61 TGAATAAAGCGCAGACACAAAGAGAGAGAGCTTACCTTACCCCGACATATACCTGCGG 120

Qy 1088 GATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCTTAAAGG 1147
Db 121 GATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCTTAAAGG 180

Qy 1148 CATTTTTCGAGCCCTTGTGACTATACCTGAGCTGAGCTGAAAGCGCAGGCTACAGG 1207
Db 181 CATTTTTCGAGCCCTTGTGACTATACCTGAGCTGAGCTGAAAGCGCAGGCTACAGG 240

Qy 1208 AGCTGTGCAGTAACAAGGGCAGCCGATTTAGCCGCTTTGTACGAGATGCCTGTGCT 1267
Db 241 AGCTGTGCAGTAACAAGGGCAGCCGATTTAGCCGCTTTGTACGAGATGCCTGTGCT 300

Qy 1268 CTTGTTGGATCT 1327
Db 301 GCTTGTGGATCT 360

Qy 1328 AACATCTTCTCTAACTTCAACCCAGACC 1355

Db 361 AACATCTTCTCTAACTTCAACCCAGACC 388

RESULT 4
US-09-949-016-150019
; Sequence 150019, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150019
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
; US-09-949-016-150019

Query Match 18.2%; Score 380.6; DB 4; Length 601;
Best Local Similarity 99.7%; Pred. No. 5.8e-122;
Matches 380; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 401 GTTTAGAACTTGTGGTTGAGCCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATT 460
Db 178 GTTTAGAACTTGTGGTTGAGCCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCATT 237

Qy 461 TTAGTCAAGCAGGACAGGAGAGATAGTGGCGCACTCCCGTGGCATCACTGCAT 520
Db 238 TTAGTCAAGCAGGACAGGAGAGATAGTGGCGCACTCCCGTGGCATCACTGCAT 297

Qy 521 CTTGAGGACAGACCTTGTGAAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTC 580
Db 298 CTTGAGGACAGACCTTGTGAAGTCAGAGCTGTACACATTGAATCTCAAGTCGAGCTTC 357

Qy 581 TGAGATTTCGATGATTCAGGAAGAAAGGATTCAGGTTTGAAGCAAAATCGAGTGAACA 640
Db 358 TGAGATTTCGATGATTCAGGAAGAAAGGATTCAGGTTTGAAGCAAAATCGAGTGAACA 417

Qy 641 GCAACCAATCCAAATGTTGTAATTGAAGACTTTGAGTCTCACTTACCGTTCCGTACCCC 700
Db 418 GCAACCAATCCAAATGTTGTAATTGAAGACTTTGAGTCTCACTTACCGTTCCGTACCCC 477

Qy 701 CACTCTCAAGCCCTCTCTGAATATTCCTGGTTTACCCCAAGAAATTTACAGGTACATC 760
Db 478 CACTCTCAAGCCCTCTCTGAATATTCCTGGTTTACCCCAAGAAATTTACAGGTACATC 537

Qy 761 TGCAGGAGTCTCTTGGCCAGG 781
Db 538 TGCAGGAGTCTCTTGGCCAGG 558

RESULT 5
US-09-949-016-15957
; Sequence 15957, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14

;; PRIOR APPLICATION NUMBER: 60/241,755
;; PRIOR FILING DATE: 2000-10-20
;; PRIOR APPLICATION NUMBER: 60/237,768
;; PRIOR FILING DATE: 2000-10-03
;; PRIOR APPLICATION NUMBER: 60/231,498
;; PRIOR FILING DATE: 2000-09-08
;; NUMBER OF SEQ ID NOS: 207012
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 15957
;; LENGTH: 35916
;; TYPE: DNA
;; ORGANISM: Human
US-09-949-016-15957

Query Match 18.1%; Score 379.4; DB 4; Length 35916;
Best Local Similarity 99.7%; Pred. No. 4.6e-120;
Matches 380; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 401 GTTTAGAACTTGTGGTTGAGCGGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATT 460
Db 10781 GTTTAGAACTTGTGGTTGAGCGGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATT 10840
QY 461 TTAGTCAAGCAGAGGACAAAGAGGAGATAAGTGGCGCACTCCCGTGGCATCACCCTGCAT 520
Db 10841 TTAGTCAAGCAGAGGACAAAGAGGAGATAAGTGGCGCACTCCCGTGGCATCACCCTGCAT 10900
QY 521 CTTGAGCAGACACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTC 580
Db 10901 CTTGAGCAGACACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTC 10960
QY 581 TGAGATTCGATGATTCAGAGGAAAGGATTCGAGGTTTGAAGCAAAATCGAGTGAACA 640
Db 10961 TGAGATTCGATGATTCAGAGGAAAGGATTCGAGGTTTGAAGCAAAATCGAGTGAACA 11020
QY 641 GCAACCAATCAATGTTGAATGAAGACTTTGAGTCTCACTTACCCGTTCCGTTACCCC 700
Db 11021 GCAACCAATCAATGTTGAATGAAGACTTTGAGTCTCACTTACCCGTTCCGTTACCCC 11080
QY 701 CACTCTCAAGCCCTCTCGAATATTCCTGGTTTACCCCGAGAAATTTACAGGTACATC 760
Db 11081 CACTCTCAAGCCCTCTCGAATATTCCTGGTTTACCCCGAGAAATTTACAGGTACATC 11140
QY 761 TGCAGGAGTCTCTTGGCCAGG 781
Db 11141 TGCAGGAGTCTCTTGGCCAGG 11161

RESULT 6
US-09-949-016-150020
; Sequence 150020, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150020
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150020

Query Match 18.1%; Score 379; DB 4; Length 601;

Best Local Similarity 99.5%; Pred. No. 2.1e-121;
Matches 379; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 401 GTTTAGAACTTGTGGTTGAGCGGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATT 460
Db 165 GTTTAGAACTTGTGGTTGAGCGGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATT 224
QY 461 TTAGTCAAGCAGAGGACAAAGAGGAGATAAGTGGCGCACTCCCGTGGCATCACCCTGCAT 520
Db 225 TTAGTCAAGCAGAGGACAAAGAGGAGATAAGTGGCGCACTCCCGTGGCATCACCCTGCAT 284
QY 521 CTTGAGCAGACACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTC 580
Db 285 CTTGAGCAGACACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTC 344
QY 581 TGAGATTCGATGATTCAGAGGAAAGGATTCGAGGTTTGAAGCAAAATCGAGTGAACA 640
Db 345 TGAGATTCGATGATTCAGAGGAAAGGATTCGAGGTTTGAAGCAAAATCGAGTGAACA 404
QY 641 GCAACCAATCAATGTTGAATGAAGACTTTGAGTCTCACTTACCCGTTCCGTTACCCC 700
Db 405 GCAACCAATCAATGTTGAATGAAGACTTTGAGTCTCACTTACCCGTTCCGTTACCCC 464
QY 701 CACTCTCAAGCCCTCTCGAATATTCCTGGTTTACCCCGAGAAATTTACAGGTACATC 760
Db 465 CACTCTCAAGCCCTCTCGAATATTCCTGGTTTACCCCGAGAAATTTACAGGTACATC 524
QY 761 TGCAGGAGTCTCTTGGCCAGG 781
Db 525 TGCAGGAGTCTCTTGGCCAGG 545

RESULT 7
US-09-949-016-150037
; Sequence 150037, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150037
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150037

Query Match 9.1%; Score 190.4; DB 4; Length 601;
Best Local Similarity 99.5%; Pred. No. 2.5e-55;
Matches 191; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1369 AGCTCAAGTTTATTTACCCAGGAAAGCTCCATTTGTCTTCAACATTGTGGAATTTCTG 1428
Db 18 AGCTCAAGTTTATTTACCCAGGAAAGCTCCATTTGTCTTCAACATTGTGGAATTTCTG 77
QY 1429 TCTACTGCCACACAGAGGTTCTCGGAGGAGTATGTACAGGTGGCTGGCTTGTG 1488
Db 78 TCTACTGCCACACAGAGGTTCTCGGAGGAGTATGTACAGGTGGCTGGCTTGTG 137
QY 1489 GTTCCTTCAGTTCTTTCAGCCAAACATACATCATCCCATGAGACAGCGGAAAGCCCTG 1548
Db 138 GTTCCTTCAGTTCTTTCAGCCAAACATACATCATCCCATGAGACAGCGGAAAGCCCTG 197

Patent No. 6682888
GENERAL INFORMATION:
APPLICANT: Loring, Jeanne F.
APPLICANT: Tingley, Debora W.
APPLICANT: Edwards, Carla M.
TITLE OF INVENTION: GENES EXPRESSED IN ALZHEIMER'S DISEASE
FILE REFERENCE: PA-0024 US
CURRENT APPLICATION NUMBER: US/09/566,921
CURRENT FILING DATE: 2000-05-05
NUMBER OF SEQ ID NOS: 138
SOFTWARE: PERL Program
SEQ ID NO 88
LENGTH: 2475
TYPE: DNA
ORGANISM: Homo sapiens
NAME/KEY: misc feature
FEATURE:
OTHER INFORMATION: Incyte ID No. 6682888 255828.26
LOCATION: 1001, 1011
OTHER INFORMATION: a, t, c, g, or other
US-09-566-921-88

Query Match 8.3%; Score 174.4; DB 4; Length 2475;
Best Local Similarity 96.7%; Pred. No. 3.3e-49;
Matches 178; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
Qy 510 ATCACTTCATCTTGGAGACAGACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCA 569
Db 1 ATCACTTCATCTTGGAGACAGACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCA 60
Qy 570 AGTCAGGCTTCTGAGATTCGATGATTCAGGAGAAAGGATTCGAGTTTGAAGCAAAA 629
Db 61 AGTCAGGCTTCTGAGATTCGATGATTCAGGAGAAAGGATTCGAGTTTGAAGCAAAA 120
Qy 630 TGCAGTGAACAGCACCAATCCATGTTGTAATTCAGACCTTGAGTCTCATTACCG 689
Db 121 TGCAGTGAACAGCACCAATCCATGTTGTAATTCAGACCTTGAGTCTCATTACCG 180
Qy 690 TTCC 693
Db 181 TTCC 184

RESULT 12
US-09-949-016-150030
Sequence 150030, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 150030
LENGTH: 601
TYPE: DNA
ORGANISM: Human
US-09-949-016-150030

Query Match 7.4%; Score 155.2; DB 4; Length 601;
Best Local Similarity 98.1%; Pred. No. 5.5e-43;
Matches 157; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 899 TTTCAAATACAGACTTTTCTATCAGCTCGAGATGCTTCAGCGTGATCTGCCCTAACCA 958
Db 315 TCTAGAAATACAGACTTTTCTATCAGCTCGAGATGCTTCAGCGTGATCTGCCCTAACCA 374
Qy 959 GTGATTCCTGAGGTACAAAGCCTTACTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGCACT 1018
Db 375 GTGATTCCTGAGGTACAAAGCCTTACTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGCACT 434
Qy 1019 GCGTCCTTTTGAATAATAAGGCAGACACACAAAGAAGG 1058
Db 435 GCGTCCTTTTGAATAATAAGGCAGACACACAAAGAAGG 474

RESULT 13

US-09-949-016-150031
Sequence 150031, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 150031
LENGTH: 601
TYPE: DNA
ORGANISM: Human
US-09-949-016-150031

Query Match 7.4%; Score 154.8; DB 4; Length 601;
Best Local Similarity 97.5%; Pred. No. 7.6e-43;
Matches 156; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 899 TTTCAAATACAGACTTTTCTATCAGCTCGAGATGCTTCAGCGTGATCTGCCCTAACCA 958
Db 151 TCTAGAAATACAGACTTTTCTATCAGCTCGAGATGCTTCAGCGTGATCTGCCCTAACCA 210
Qy 959 GTGATTCCTGAGGTACAAAGCCTTACTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGCACT 1018
Db 211 GTGATTCCTGAGGTACAAAGCCTTACTCCAAAGACTGCGAGCTTGAAGATAAAAGAGAGCACT 270
Qy 1019 GCGTCCTTTTGAATAATAAGGCAGACACACAAAGAAGG 1058
Db 271 GCGTCCTTTTGAATAATAAGGCAGACACACAAAGAAGG 310

RESULT 14

US-09-471-276-495
Sequence 495, Application US/09471276
Patent No. 6822072
GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Duclert A.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
Patent No. 6822072
FILE REFERENCE: GENSET.025CPI
CURRENT APPLICATION NUMBER: US/09/471,276
CURRENT FILING DATE: 1999-12-21
EARLIER APPLICATION NUMBER: 09/057,719
EARLIER FILING DATE: 1998-04-09
EARLIER APPLICATION NUMBER: 09/069,047
EARLIER FILING DATE: 1998-04-28
EARLIER APPLICATION NUMBER: PCT/IB99/00712

; EARLIER FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 1622
; SOFTWARE: Patent.Pm
; SEQ ID NO 495
; LENGTH: 244
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 70..243
; NAME/KEY: sig_peptide
; LOCATION: 70..114
; OTHER INFORMATION: Von Heijne matrix
; OTHER INFORMATION: score 4.4000009536743
; OTHER INFORMATION: seq RFLLIYATQQQA/KA
US-09-471-276-495

Query Match 6.2%; Score 130.8; DB 4; Length 244;
Best Local Similarity 88.1%; Pred. No. 9.2e-35;
Matches 141; Conservative 1; Mismatches 18; Indels 0; Gaps 0;
Qy 1 ATGAGGAGGTTCTGTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 60
Db 70 ATGAGGAGGTTCTGTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 129
Qy 61 GAAATGTGTGACGAGCTGTGTACATGGATTTTCAGATCTTCACTGTATTAGTGAA 120
Db 130 GAAATGTGTGACGAGCTGTGTACATGGATTTTCAGATCTTCACTGTATTAGTGAA 189
Qy 121 TCCGATAAGTATGACCTAAAAACCGAAACAGCTCTCTTTG 160
Db 190 TCCGATAAGGTTCTCGGTGATTCAGANATACACTACTTTTG 229

RESULT 15
US-09-949-016-150007
; Sequence 150007, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150007
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150007

Query Match 6.1%; Score 128.6; DB 4; Length 601;
Best Local Similarity 99.2%; Pred. No. 1.1e-33;
Matches 128; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 1 ATGAGGAGGTTCTGTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 60
Db 236 ATGAGGAGGTTCTGTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 295
Qy 61 GAAATGTGTGACGAGCTGTGTACATGGATTTTCAGATCTTCACTGTATTAGTGAA 120
Db 296 GAAATGTGTGACGAGCTGTGTACATGGATTTTCAGATCTTCACTGTATTAGTGAA 355
Qy 121 TCCGATAAG 129
|||||

Db 356 TCCGATAAG 364
Search completed: November 8, 2005, 17:00:53
Job time : 237.42 secs

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OM nucleic - nucleic search, using sw model

Run on: November 8, 2005, 16:35:10 ; Search time 1121.54 Seconds
(without alignments)
15440.336 Million cell updates/sec

Title: US-09-371-347A-45

Perfect score: 2094

Sequence: 1 atgaggagggttcgttact.....ttcaggatattgtgataa 2094

Scoring table:
IDENTITY NUC
Gapop 10.0 , Gapext 1.0

Searched: 9794790 seqs, 4134909567 residues

Total number of hits satisfying chosen parameters: 19589580

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications NA:*

- 1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq.*
- 2: /cgn2_6/ptodata/1/pubpna/FCT_NEW_PUB.seq.*
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- 10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq.*
- 11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq.*
- 12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq.*
- 13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq.*
- 14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq.*
- 15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq.*
- 16: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq.*
- 17: /cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq.*
- 18: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq.*
- 19: /cgn2_6/ptodata/1/pubpna/US10F_PUBCOMB.seq.*
- 20: /cgn2_6/ptodata/1/pubpna/US10G_PUBCOMB.seq.*
- 21: /cgn2_6/ptodata/1/pubpna/US10H_PUBCOMB.seq.*
- 22: /cgn2_6/ptodata/1/pubpna/US10I_PUBCOMB.seq.*
- 23: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq.*
- 24: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq.*
- 25: /cgn2_6/ptodata/1/pubpna/US11A_PUBCOMB.seq.*
- 26: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq.*
- 27: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq.*
- 28: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	2094	100.0	2094	10	US-09-371-347-45
2	2094	100.0	2094	26	US-11-119-096-45
3	2081	99.4	2097	10	US-09-371-347-1
4	2081	99.4	2097	26	US-11-119-096-1
5	2081	99.4	3259	10	US-09-371-347-24

6	2081	99.4	3259	24	US-10-450-763-874	Sequence 874, App
7	2081	99.4	3259	26	US-11-119-096-24	Sequence 24, Appl
8	2079.4	99.3	2097	10	US-09-371-347-41	Sequence 41, Appl
9	2079.4	99.3	2097	10	US-09-371-347-43	Sequence 43, Appl
10	2079.4	99.3	2097	26	US-11-119-096-41	Sequence 41, Appl
11	2079.4	99.3	2097	26	US-11-119-096-43	Sequence 43, Appl
12	2072.6	99.0	3256	22	US-10-741-600-692	Sequence 692, App
13	2072.6	99.0	3274	22	US-10-741-600-693	Sequence 693, App
14	2063	98.5	2093	10	US-09-371-347-47	Sequence 47, Appl
15	2063	98.5	2093	26	US-11-119-096-47	Sequence 47, Appl
16	379.8	18.1	43985	17	US-10-741-600-17757	Sequence 17757, A
17	379.8	18.1	591	17	US-10-029-386-6369	Sequence 6369, Ap
18	377.8	18.0	591	17	US-10-029-386-1735	Sequence 1735, Ap
19	377.4	18.0	379	17	US-10-029-386-20100	Sequence 20100, A
20	375.8	17.9	379	17	US-10-029-386-15435	Sequence 15435, A
21	286	13.7	583	13	US-09-925-065A-758988	Sequence 758988,
22	284.8	13.6	583	13	US-09-925-065A-827971	Sequence 827971,
23	275.8	13.2	503	24	US-10-450-763-873	Sequence 873, App
24	200.6	9.6	201	22	US-10-741-600-15583	Sequence 15583, A
25	200.6	9.6	201	22	US-10-741-600-15584	Sequence 15584, A
26	200.6	9.6	201	22	US-10-741-600-15589	Sequence 15589, A
27	200.6	9.6	201	22	US-10-741-600-15590	Sequence 15590, A
28	200.6	9.6	201	22	US-10-741-600-15592	Sequence 15592, A
29	200.6	9.6	201	22	US-10-741-600-15594	Sequence 15594, A
30	200.6	9.6	201	22	US-10-741-600-15598	Sequence 15598, A
31	200.6	9.6	201	22	US-10-741-600-15599	Sequence 15599, A
32	200.6	9.6	201	22	US-10-741-600-15600	Sequence 15600, A
33	200.6	9.6	201	22	US-10-741-600-15606	Sequence 15606, A
34	200.6	9.6	201	22	US-10-741-600-15609	Sequence 15609, A
35	200.6	9.6	201	22	US-10-741-600-15610	Sequence 15610, A
36	200.6	9.6	201	22	US-10-741-600-15612	Sequence 15612, A
37	200.6	9.6	201	22	US-10-741-600-15613	Sequence 15613, A
38	200.6	9.6	201	22	US-10-741-600-15614	Sequence 15614, A
39	200.6	9.6	201	22	US-10-741-600-15620	Sequence 15620, A
40	200.6	9.6	201	22	US-10-741-600-15621	Sequence 15621, A
41	200.6	9.6	201	22	US-10-741-600-15623	Sequence 15623, A
42	200.6	9.6	201	22	US-10-741-600-15625	Sequence 15625, A
43	200.6	9.6	201	22	US-10-741-600-15629	Sequence 15629, A
44	200.6	9.6	201	22	US-10-741-600-15630	Sequence 15630, A
45	200.6	9.6	201	22	US-10-741-600-15631	Sequence 15631, A

ALIGNMENTS

RESULT 1

US-09-371-347-45
; Sequence 45, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371.347
; CURRENT FILING DATE: 1999-08-10
; PRIOR FILING DATE: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 45
; LENGTH: 2094
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-09-371-347-45

Query Match 100.0%; Score 2094; DB 10; Length 2094;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2094; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGAGGAGTTCTCTTACTATATCTACACAGCAGGACAGGAAAGCCATCGCAGAA 60
Db |||||
1 ATGAGGAGTTCTCTTACTATATGCTACACAGCGGACAGGCAAGGCCATCGCAGAA 60
Qy 61 GAAATGTGTAGCAAGCTGTGGTACATGGAATTTCTGCAGATCTTCACTGATTAAGTGA 120
Db |||||
61 GAAATGTGTAGCAAGCTGTGGTACATGGAATTTCTGCAGATCTTCACTGATTAAGTGA 120
Qy 121 TCCGATAGTATGACCTTAAACCGAACAACAGCTCTCTTGTGTGTGTGTCTTACCCAG 180
Db |||||
121 TCCGATAGTATGACCTTAAACCGAACAACAGCTCTCTTGTGTGTGTGTCTTACCCAG 180
Qy 181 GGCAACCGGAGACCCACCGCACACAGCCCGCAAGTTTGTAAAGAAATACAGAAACCAACA 240
Db |||||
181 GGCAACCGGAGACCCACCGCACACAGCCCGCAAGTTTGTAAAGAAATACAGAAACCAACA 240
Qy 241 CTGCCGTTGATTTCTTTGCTCACTGCGGTATGGGTTACTGGGTCTCGGTGATTCAGAA 300
Db |||||
301 TACACCTACTTTTGCNAATGGGGGAAGATATGATAAACGACTTCAAGAGCTTGGAGCC 360
Db |||||
301 TACACCTACTTTTGCNAATGGGGGAAGATATGATAAACGACTTCAAGAGCTTGGAGCC 360
Qy 361 CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGGTTTAGAACTTTGGTTGAG 420
Db |||||
361 CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGGTTTAGAACTTTGGTTGAG 420
Qy 421 CCGTGGATTGCTGGAATCTGCGCAGCCCTCAGAAAGCATTTTAGTCAAGCAGAGGACAA 480
Db |||||
421 CCGTGGATTGCTGGAATCTGCGCAGCCCTCAGAAAGCATTTTAGTCAAGCAGAGGACAA 480
Qy 481 GAGGAGTAAGTGGCGCACTCCCGTGGCATCACTGTCATCTTGGAGACAGACCTTGTG 540
Db |||||
481 GAGGAGTAAGTGGCGCACTCCCGTGGCATCACTGTCATCTTGGAGACAGACCTTGTG 540
Qy 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGAGCTTCTGAGATTCGATGATTCAGGA 600
Db |||||
541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGAGCTTCTGAGATTCGATGATTCAGGA 600
Qy 601 AGAAAGGATTTCTGAGGTTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGA 660
Db |||||
601 AGAAAGGATTTCTGAGGTTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGA 660
Qy 661 ATTGAGAGCTTGTGCTCTACTTACCCGTTGGTACCCCACTCTCACAGCCTCTCTG 720
Db |||||
661 ATTGAGAGCTTGTGCTCTACTTACCCGTTGGTACCCCACTCTCACAGCCTCTCTG 720
Qy 721 AATATTCCTGGTTTACCCCAAGATATTTACAGGTACATCTGCAGAGCTCTTGGCCAG 780
Db |||||
721 AATATTCCTGGTTTACCCCAAGATATTTACAGGTACATCTGCAGAGCTCTTGGCCAG 780
Qy 781 GAGGAAAGCCCAAGTATCTGACCTTACAGATCCAGTTTTCAGTGCCTCAATTTCAAAG 840
Db |||||
781 GAGGAAAGCCCAAGTATCTGACCTTACAGATCCAGTTTTCAGTGCCTCAATTTCAAAG 840
Qy 841 GCAGTTCAACTTACTAGCAATGATGCCATAAACCACTCTGCTGGTAGAATTTGACATTT 900
Db |||||
841 GCAGTTCAACTTACTAGCAATGATGCCATAAACCACTCTGCTGGTAGAATTTGACATTT 900
Qy 901 TCAATACAGACTTTTCTCTATCAGCTCGAGATGCTTTCAGCGTATCTGCCCTAAACAGT 960
Db |||||
901 TCAATACAGACTTTTCTCTATCAGCTCGAGATGCTTTCAGCGTATCTGCCCTAAACAGT 960
Qy 961 GATTCGAGGTACAAAGCCTACTCCAAAGACTGCACTTGAAGTAAAGAGAGCACTGTC 1020
Db |||||
961 GATTCGAGGTACAAAGCCTACTCCAAAGACTGCACTTGAAGTAAAGAGAGCACTGTC 1020
Qy 1021 GTCTTTTGAATAAAGGCGAGACAAAGAAAGAGGAGCTTACCTTACCCAGCATATA 1080
Db |||||
1021 GTCTTTTGAATAAAGGCGAGACAAAGAAAGAGGAGCTTACCTTACCCAGCATATA 1080
Qy 1081 CCTGGGATGTTCTCTCCAGTTTCACTTTTACCTGGTCTTGAATTCGAGCAATTCCT 1140

Db 1081 CCTGGGATGTTCTCTCCAGTTCACTTTTACCTGGTGTCTTGAATTCGAGCAATTCCT 1140
Qy 1141 AAAAAGCATTTTTCGAGCCCTTGTGGACTATACCACTGACAGTGTGAAAAGGCGAGG 1200
Db |||||
1141 AAAAAGCATTTTTCGAGCCCTTGTGGACTATACCACTGACAGTGTGAAAAGGCGAGG 1200
Qy 1201 CTACAGAGCTGTGACGTAAACAAAGGGCGAGCCGATATATAGCCGCTTTGTACGAGATGCC 1260
Db |||||
1201 CTACAGAGCTGTGACGTAAACAAAGGGCGAGCCGATATATAGCCGCTTTGTACGAGATGCC 1260
Qy 1261 TGTGCTGCTTGTGTGGATCTCTCTCGCTTCCCTTCTTGTGCCAGCCACCACTCAGTCTC 1320
Db |||||
1261 TGTGCTGCTTGTGTGGATCTCTCTCGCTTCCCTTCTTGTGCCAGCCACCACTCAGTCTC 1320
Qy 1321 CTGCTCGAAATCTTCTTAAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Db |||||
1321 CTGCTCGAAATCTTCTTAAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Qy 1381 TTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCCACA 1440
Db |||||
1381 TTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCCACA 1440
Qy 1441 ACAGAGTTCTGCGGAAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTTGCTTCAGTT 1500
Db |||||
1441 ACAGAGTTCTGCGGAAAGGAGTATGTACAGGCTGGCTGGCTTGTGGTTGCTTCAGTT 1500
Qy 1501 CTTGAGCCAAACATACATGATGCCATGAAGACAGCGGAAAGCCCTGGCTCTTAAGATA 1560
Db |||||
1501 CTTGAGCCAAACATACATGATGCCATGAAGACAGCGGAAAGCCCTGGCTCTTAAGATA 1560
Qy 1561 TCCATCTCTCTCGAAACAAATTTTCCACITTTACAGATGACCCCTCAATCCCAATC 1620
Db |||||
1561 TCCATCTCTCTCGAAACAAATTTTCCACITTTACAGATGACCCCTCAATCCCAATC 1620
Qy 1621 ATAAATGTTGGTTCAGGAAACCGGATGATGATGAGGCTTATTTGGGTTCTTAAACATAGAGAG 1680
Db |||||
1621 ATAAATGTTGGTTCAGGAAACCGGATGATGATGAGGCTTATTTGGGTTCTTAAACATAGAGAG 1680
Qy 1681 AAATCCAGAAACAAACCCAGATGGAATTTTGGAGCAATGTGGTTTGGCTGCGAGG 1740
Db |||||
1681 AAATCCAGAAACAAACCCAGATGGAATTTTGGAGCAATGTGGTTTGGCTGCGAGG 1740
Qy 1741 CATAAGGATAGGATTTATCTATTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGGATC 1800
Db |||||
1741 CATAAGGATAGGATTTATCTATTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGGATC 1800
Qy 1801 TTAATCATCTTAAAGGTTTCTTCTCAAGAGATGCTCTCTTGGGAGGAGGAAAGCCCA 1860
Db |||||
1801 TTAATCATCTTAAAGGTTTCTTCTCAAGAGATGCTCTCTTGGGAGGAGGAAAGCCCA 1860
Qy 1861 GCAAAGTATGTACAAAGCAACATCCAGCTTATGGCCAGAGGTTGGGAGGATCTCTCCTC 1920
Db |||||
1861 GCAAAGTATGTACAAAGCAACATCCAGCTTATGGCCAGAGGTTGGGAGGATCTCTCCTC 1920
Qy 1921 CAGGAGACGCCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAGAGATGTACAT 1980
Db |||||
1921 CAGGAGACGCCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAGAGATGTACAT 1980
Qy 1981 GATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACCTAGAAAGCAATGAAA 2040
Db |||||
1981 GATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACCTAGAAAGCAATGAAA 2040
Qy 2041 ACCCTGGCCATTTAAAGAAAGAAACCGCTTACCTTCAGGATATTTGGTCTATAA 2094
Db |||||
2041 ACCCTGGCCATTTAAAGAAAGAAACCGCTTACCTTCAGGATATTTGGTCTATAA 2094

RESULT 2

US-11-119-096-45
; Sequence 45, Application US/11119096
; Publication No. US2005019701A1
; GENERAL INFORMATION:

APPLICANT: Gravel, Roy A,
APPLICANT: Rozen, Rima
APPLICANT: Leclerc, Daniel
APPLICANT: Wilson, Aaron
APPLICANT: Rosenblatt, David
TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
FILE REFERENCE: 50004/003005
CURRENT APPLICATION NUMBER: US/11/119,096
CURRENT FILING DATE: 2005-04-29
PRIOR APPLICATION NUMBER: 09/487,841
PRIOR FILING DATE: 2000-01-19
PRIOR APPLICATION NUMBER: 09/371,347
PRIOR FILING DATE: 1999-08-10
PRIOR APPLICATION NUMBER: 09/232,028
PRIOR FILING DATE: 1999-01-15
PRIOR APPLICATION NUMBER: 60/071,622
PRIOR FILING DATE: 1998-01-16
NUMBER OF SEQ ID NOS: 63
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 45
LENGTH: 2094
TYPE: DNA
ORGANISM: Homo sapiens
US-11-119-096-45

Query Match 100.0%; Score 2094; DB 26; Length 2094;

Best Local Similarity 100.0%; Pred. No. 0;
Matches 2094; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1	ATGAGGAGTTCTGTCTTACTATATGCTACACAGCAGGACGCAAGCCATCGCAGAA	60
Db	1	ATGAGGAGTTCTGTCTTACTATATGCTACACAGCAGGACGCAAGCCATCGCAGAA	60
Qy	61	CAATGTGTGACGAGCTGTGTATCATGATTTCTGCAGATCTTCACTGTATTAGTAA	120
Db	61	CAATGTGTGACGAGCTGTGTATCATGATTTCTGCAGATCTTCACTGTATTAGTAA	120
Qy	121	TCCGATAGTATGACCTAAACACGAAACAGCTCTCTTGTGTGTGTCTTACCAAG	180
Db	121	TCCGATAGTATGACCTAAACACGAAACAGCTCTCTTGTGTGTGTCTTACCAAG	180
Qy	181	GGCAGCGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA	240
Db	181	GGCAGCGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA	240
Qy	241	CTGCCGTTGATTTCTTGTCTCACTCGCGGTATGGGTACTGGGTCTCGGTGATTCAGAA	300
Db	241	CTGCCGTTGATTTCTTGTCTCACTCGCGGTATGGGTACTGGGTCTCGGTGATTCAGAA	300
Qy	301	TACACCTACTTTTGCATGGGGGGAAGATAATTGATAACGACTTCAAGAGCTTGGAGCC	360
Db	301	TACACCTACTTTTGCATGGGGGGAAGATAATTGATAACGACTTCAAGAGCTTGGAGCC	360
Qy	361	CGGCATTTCTATGACACCTGGACATGACATGCTGTAGTTTGTAGTCTTGTGTGAG	420
Db	361	CGGCATTTCTATGACACCTGGACATGACATGCTGTAGTTTGTAGTCTTGTGTGAG	420
Qy	421	CCGTGGATTGCTGGACCTCGCGGACCCCTCAGAAAGCATTTTGTAGTCAAGCAGAGCA	480
Db	421	CCGTGGATTGCTGGACCTCGCGGACCCCTCAGAAAGCATTTTGTAGTCAAGCAGAGCA	480
Qy	481	CAGGAGTAAGTGGCGCACTCCCGGTGCATCACCCTGATCTTGTAGGACAGACTTGTG	540
Db	481	CAGGAGTAAGTGGCGCACTCCCGGTGCATCACCCTGATCTTGTAGGACAGACTTGTG	540
Qy	541	AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600
Db	541	AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600
Qy	601	AGAAAGGATTTCTGAGTTTGAACCAAAATGCAGTGAACAGCAATCCAAATGTTGTA	660
Db	601	AGAAAGGATTTCTGAGTTTGAACCAAAATGCAGTGAACAGCAATCCAAATGTTGTA	660

Db	601	AGAAAGGATTTCTGAGTTTGAACCAAAATGCAGTGAACAGCAATCCAAATGTTGTA	660
Qy	661	ATTGAAGACTTTGAGTCTCTCACTTACCGTTTCGGTACCCCACTCTCACAAGCCTCTCTG	720
Db	661	ATTGAAGACTTTGAGTCTCTCACTTACCGTTTCGGTACCCCACTCTCACAAGCCTCTCTG	720
Qy	721	AATATCTGTTTACCCCAAGATATTTACAGGTACATCTGCGAGGAGTCTCTTGGCCAG	780
Db	721	AATATCTGTTTACCCCAAGATATTTACAGGTACATCTGCGAGGAGTCTCTTGGCCAG	780
Qy	781	GAGGAAAGCCAAAGTATCTGTGACCTCAGCAGATCCAGTTTTCAGTGCCCAATTTCAAG	840
Db	781	GAGGAAAGCCAAAGTATCTGTGACCTCAGCAGATCCAGTTTTCAGTGCCCAATTTCAAG	840
Qy	841	GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTTGACATT	900
Db	841	GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTTGACATT	900
Qy	901	TCAAATACAGACTTTTCTATCAGCCTGGAGATGCTTTCAGCGTGTATCTGCCCTAACAGT	960
Db	901	TCAAATACAGACTTTTCTATCAGCCTGGAGATGCTTTCAGCGTGTATCTGCCCTAACAGT	960
Qy	961	GATTCGAGGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATATAAAGAGAGCACTGC	1020
Db	961	GATTCGAGGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATATAAAGAGAGCACTGC	1020
Qy	1021	GTCTCTTTTGAATAAAGGACACACAAAGAAAGAGGAGCTACCTTACCCAGCATATA	1080
Db	1021	GTCTCTTTTGAATAAAGGACACACAAAGAAAGAGGAGCTACCTTACCCAGCATATA	1080
Qy	1081	CTCTCGGAGTGTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT	1140
Db	1081	CTCTCGGAGTGTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT	1140
Qy	1141	AAAAGGCAATTTTTCGAGCCCTTGTGAGCTATACCACTGACAGTGTGAAAGGCGAGG	1200
Db	1141	AAAAGGCAATTTTTCGAGCCCTTGTGAGCTATACCACTGACAGTGTGAAAGGCGAGG	1200
Qy	1201	CTACAGGAGCTGTGCAGTAAACAAAGGCGAGCCGATTTATAGCCGCTTGTACGAGATGCC	1260
Db	1201	CTACAGGAGCTGTGCAGTAAACAAAGGCGAGCCGATTTATAGCCGCTTGTACGAGATGCC	1260
Qy	1261	TGTGCTGCTTGTGTGATCTCTCTCGTTTCCCTTCTTTCGAGCCACCACTCAGTCTC	1320
Db	1261	TGTGCTGCTTGTGTGATCTCTCTCGTTTCCCTTCTTTCGAGCCACCACTCAGTCTC	1320
Qy	1321	CTGCTCGAACAATCTTCTTAACTTCAACCCAGACATATTCGTGTGCAAGCTCAAGTTTA	1380
Db	1321	CTGCTCGAACAATCTTCTTAACTTCAACCCAGACATATTCGTGTGCAAGCTCAAGTTTA	1380
Qy	1381	TTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGAATTTCTGTCTACTGCCACA	1440
Db	1381	TTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGAATTTCTGTCTACTGCCACA	1440
Qy	1441	ACAGAGTTCTGCGGAAAGGAGTATGACAGCTGGCTGGCTTGTGGTTTGTGTTTCAATT	1500
Db	1441	ACAGAGTTCTGCGGAAAGGAGTATGACAGCTGGCTGGCTTGTGGTTTGTGTTTCAATT	1500
Qy	1501	CTTCAGCCCAACATACATGATCCATGACAGAGCGGGAAGCCCTGGCTCTTAAGATA	1560
Db	1501	CTTCAGCCCAACATACATGATCCATGACAGAGCGGGAAGCCCTGGCTCTTAAGATA	1560
Qy	1561	TCCATCTCTCTCGAAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCAATC	1620
Db	1561	TCCATCTCTCTCGAAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCAATC	1620
Qy	1621	ATAATGTTGGTCCAGGAACCGGATAGCCCGCTTTATTTGGGTTCTTACAAATAGAGAG	1680
Db	1621	ATAATGTTGGTCCAGGAACCGGATAGCCCGCTTTATTTGGGTTCTTACAAATAGAGAG	1680
Qy	1681	AACTCCAGAAACAAACCCAGATGGAATTTTGGAGCAATGTTGTTTGGCTGCGAGG	1740
Db	1681	AACTCCAGAAACAAACCCAGATGGAATTTTGGAGCAATGTTGTTTGGCTGCGAGG	1740

QY 1381 TTTCACCCAGGAAGCTCATTGTTCTTCAACATTTGGGAATTTCTGTCTACTGCCACA 1440
Db 1381 TTTCACCCAGGAAGCTCATTGTTCTTCAACATTTGGGAATTTCTGTCTACTGCCACA 1440
QY 1441 ACAGAGGTTCTCGGAAGGAGTATGTACAGGCTGGCTGGCTGTGTGTTGCTTCAGTT 1500
Db 1441 ACAGAGGTTCTCGGAAGGAGTATGTACAGGCTGGCTGGCTGTGTGTTGCTTCAGTT 1500
QY 1501 CTTACGCCAAACATACATGTCATCCATGAAGACAGCGGGAAGCCCTGGCTCTAAGATA 1560
Db 1501 CTTACGCCAAACATACATGTCATCCATGAAGACAGCGGGAAGCCCTGGCTCTAAGATA 1560
QY 1561 TCCATCTCTCTCGAACAACAAATTTCTTCCATTTACAGATGACCCCTCAATCCCATC 1620
Db 1561 TCCATCTCTCTCGAACAACAAATTTCTTCCATTTACAGATGACCCCTCAATCCCATC 1620
QY 1621 ATAATGGTGGGTCAGGAACCGGATAGCCCGTTTATTTGGGTTCTTCAACATAGAGAG 1680
Db 1621 ATAATGGTGGGTCAGGAACCGGATAGCCCGTTTATTTGGGTTCTTCAACATAGAGAG 1680
QY 1681 AAACCTCCAGGAACAAACACCCAGATGGAATTTTGGAGCAATGTG---GTTTTTGGCTGC 1737
Db 1681 AAACCTCCAGGAACAAACACCCAGATGGAATTTTGGAGCAATGTG---GTTTTTGGCTGC 1740
QY 1738 AGGCATTAAGGATAGGATATCTATTTCAGAAAAGAGCTCAGACATTTCTTAAGCATGG 1797
Db 1741 AGGCATTAAGGATAGGATATCTATTTCAGAAAAGAGCTCAGACATTTCTTAAGCATGG 1800
QY 1798 ATCTTAACCTCATTAAGGTTTCTCTCTCAGAGATGCTCCTGTTGGGAGGAGGAAGCC 1857
Db 1801 ATCTTAACCTCATTAAGGTTTCTCTCTCAGAGATGCTCCTGTTGGGAGGAGGAAGCC 1860
QY 1858 CCAGCAAAAGTATGTACAGAACAAACATCCAGCTTTCATGGCCAGAGTGGCGAGAACTCTC 1917
Db 1861 CCAGCAAAAGTATGTACAGAACAAACATCCAGCTTTCATGGCCAGAGTGGCGAGAACTCTC 1920
QY 1918 CTCACGAGAACGGCCATATTTATGTGTGTGAGATGCAAGAAATATGGCCAAAGATGTA 1977
Db 1921 CTCACGAGAACGGCCATATTTATGTGTGTGAGATGCAAGAAATATGGCCAAAGATGTA 1980
QY 1978 CATGATGCCCTTGTCCAAATATAGCAAGAGGTTGGAGTTGAAAACCTAGAACAAATG 2037
Db 1981 CATGATGCCCTTGTCCAAATATAGCAAGAGGTTGGAGTTGAAAACCTAGAACAAATG 2040
QY 2038 AAAACCTGGCCACTTTAAAGAGAAACAAACCTACCTTCAGGATATTTGGTCATAA 2094
Db 2041 AAAACCTGGCCACTTTAAAGAGAAACAAACCTACCTTCAGGATATTTGGTCATAA 2097

RESULT 4
US-11-119-096-1
; Sequence 1, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16

; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-1

Query Match 99.4%; Score 2081; DB 26; Length 2097;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 2094; Conservative 0; Mismatches 0; Indels 3; Gaps 1;

QY 1 ATGAGGAGGTTTCTGTCTACTATATGCTACAGAGGAGGACAGGAAAGCCCATCCAGAA 60
Db 1 ATGAGGAGGTTTCTGTCTACTATATGCTACAGAGGAGGACAGGAAAGCCCATCCAGAA 60
QY 61 GAAATGTGTGAGCAAGCTGTGTACATGATTTTCTGAGATCTTCTACGTATTAAGTGA 120
Db 61 GAAATGTGTGAGCAAGCTGTGTACATGATTTTCTGAGATCTTCTACGTATTAAGTGA 120
QY 121 TCCGATAGTATGACCTAAACACCGAAGCTCCTCTTGTGTGTGTGTCTTACACAG 180
Db 121 TCCGATAGTATGACCTAAACACCGAAGCTCCTCTTGTGTGTGTGTCTTACACAG 180
QY 181 GGCACCGGAGACCCACCGACACAGCCCGGAAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 181 GGCACCGGAGACCCACCGACACAGCCCGGAAAGTTTGTAAAGAAATACAGAACCAACA 240
QY 241 CTGCGGTTGATTTCTTGTCTCAGCTGGGTATGGGTCTCGGTGATTCAGAA 300
Db 241 CTGCGGTTGATTTCTTGTCTCAGCTGGGTATGGGTCTCGGTGATTCAGAA 300
QY 301 TACACCTACTTTTGAATGGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTCGAGCC 360
Db 301 TACACCTACTTTTGAATGGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTCGAGCC 360
QY 361 CGGCAATTTCTATGACATCGGACATGCTGTGTAGTTTGAACCTTGTGTTGAG 420
Db 361 CGGCAATTTCTATGACATCGGACATGCTGTGTAGTTTGAACCTTGTGTTGAG 420
QY 421 CCGTGGATTGCTGGACCTCGGCGACCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA 480
Db 421 CCGTGGATTGCTGGACCTCGGCGACCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA 480
QY 481 GAGGAGATAAGTGGCGCACTCCCGTGGCATCAGCTGATCTTGGAGCAGACAGCTCTGTG 540
Db 481 GAGGAGATAAGTGGCGCACTCCCGTGGCATCAGCTGATCTTGGAGCAGACAGCTCTGTG 540
QY 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
Db 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
QY 601 AGAAAGGATTCGAGGTTTGAAGCAAAATCGAGTGAACAGCAACCAATCCATTTGTA 660
Db 601 AGAAAGGATTCGAGGTTTGAAGCAAAATCGAGTGAACAGCAACCAATCCATTTGTA 660
QY 661 ATTGAAGACTTTGAGTCTCTCACTTACCGTTGGTACCCCACTCTCAAGAGCTCTCTG 720
Db 661 ATTGAAGACTTTGAGTCTCTCACTTACCGTTGGTACCCCACTCTCAAGAGCTCTCTG 720
QY 721 AATATTCCTGTTTACCCCAAGATATTTACAGGTATATCTGAGAGTCTCTTGGCCAG 780
Db 721 AATATTCCTGTTTACCCCAAGATATTTACAGGTATATCTGAGAGTCTCTTGGCCAG 780
QY 781 GAGGAAGCCCAAGTATCTGTGACCTCAGCATCCAGTTTCAAGTCCCAATTTCAAAG 840
Db 781 GAGGAAGCCCAAGTATCTGTGACCTCAGCATCCAGTTTCAAGTCCCAATTTCAAAG 840
QY 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGTTAGAAATTTGACATT 900
Db 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGTTAGAAATTTGACATT 900
QY 901 TCAATACAGACTTTTCTCTATCAGCTGGAGATGCTTTCAGCGTGTATCTGCCCTAACAGT 960

Db 901 TCATAACAGACTTTCTCTATCAGCTGGAGATGCTTACGGTGAICTGCGCTTAAACAGT 960
Qy 961 GATTCTGAGGTACAAAGCCTACTCAAGAAGCTGAGCTTGAAGATAAAGAGAGACTGC 1020
Db 961 GATTCTGAGGTACAAAGCCTACTCAAGAAGCTGAGCTTGAAGATAAAGAGAGACTGC 1020
Qy 1021 GTCCCTTTGAAATATAAGGCGAGACACAAGAGAAAGGAGCTACTTACCCCGACATATA 1080
Db 1021 GTCCCTTTGAAATATAAGGCGAGACACAAGAGAAAGGAGCTACTTACCCCGACATATA 1080
Qy 1081 CCTCGGGAGTCTCTCTCAGCTTCATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Db 1081 CCTCGGGAGTCTCTCTCAGCTTCATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Qy 1141 AAAAAGGCAATTTTGGAGGCCCTTGTGAGCTATACCAAGTACAGTGTGAAAAGCGGAG 1200
Db 1141 AAAAAGGCAATTTTGGAGGCCCTTGTGAGCTATACCAAGTACAGTGTGAAAAGCGGAG 1200
Qy 1201 CTACAGGAGCTGTGAGTAAACAAGGGGCGAGCGATATATAGCCGCTTGTACGAGATGCC 1260
Db 1201 CTACAGGAGCTGTGAGTAAACAAGGGGCGAGCGATATATAGCCGCTTGTACGAGATGCC 1260
Qy 1261 TGTGCTGCTGTTTGGATCTCTCTCGCTTTCCTTCTTCCAGCCACCACTCAGTCTC 1320
Db 1261 TGTGCTGCTGTTTGGATCTCTCTCGCTTTCCTTCTTCCAGCCACCACTCAGTCTC 1320
Qy 1321 CTGCTCGAATCTTCTTAAACCTTCAACCCAGACCATATGCTGTGCAAGCTCAAGTTTA 1380
Db 1321 CTGCTCGAATCTTCTTAAACCTTCAACCCAGACCATATGCTGTGCAAGCTCAAGTTTA 1380
Qy 1381 TTTTACCAGCAAGCTCCATTTGTCTTCAACATTTGGAAATTTCTGTCTACTGCCACA 1440
Db 1381 TTTTACCAGCAAGCTCCATTTGTCTTCAACATTTGGAAATTTCTGTCTACTGCCACA 1440
Qy 1441 ACAGAGGTTCTCGCGAAGGAGTAGTACAGGCTGGCTGGCTTGTGTTGGTTTTCAGTT 1500
Db 1441 ACAGAGGTTCTCGCGAAGGAGTAGTACAGGCTGGCTGGCTTGTGTTGGTTTTCAGTT 1500
Qy 1501 CTTGAGCAAAACATACATGCAATGCCATGAAGAGCGGGAAAGCCCTGGCTCTTAAGATA 1560
Db 1501 CTTGAGCAAAACATACATGCAATGCCATGAAGAGCGGGAAAGCCCTGGCTCTTAAGATA 1560
Qy 1561 TCCATCTCTCTCGAACAACAAATTTCTTCCACTTACCAGATGACCCCTCAATCCCAC 1620
Db 1561 TCCATCTCTCTCGAACAACAAATTTCTTCCACTTACCAGATGACCCCTCAATCCCAC 1620
Qy 1621 ATAATGTTGGTCCAGGAACCGGCATAGCCCGTTTATTGGGTTTCCTAACACATAGAG 1680
Db 1621 ATAATGTTGGTCCAGGAACCGGCATAGCCCGTTTATTGGGTTTCCTAACACATAGAG 1680
Qy 1681 AAATCCAGAAACAAACACCCAGATGGAAATTTTGGAGCAATGTG--GTTTTTGGCTGC 1737
Db 1681 AAATCCAGAAACAAACACCCAGATGGAAATTTTGGAGCAATGTGTTTGTGTTGGCTGC 1740
Qy 1738 AGGCATAGGATAGGATATCTATTCAAGAAAGGCTCAGACATTTCTTAAAGCATGG 1797
Db 1741 AGGCATAGGATAGGATATCTATTCAAGAAAGGCTCAGACATTTCTTAAAGCATGG 1800
Qy 1798 ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1857
Db 1801 ATCTTAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1860
Qy 1858 CCAGCAAAAGTATGTAACAAGCAACATCCAGCTTCAAGCCAGAGGTGGCGAGAAATCTC 1917
Db 1861 CCAGCAAAAGTATGTAACAAGCAACATCCAGCTTCAAGCCAGAGGTGGCGAGAAATCTC 1920
Qy 1918 CTCAGGAGAACGGCCATATTTTGTGTGGAGATGCAAGAAATATGGCCAGAGATGTA 1977
Db 1921 CTCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAGAGATGTA 1980
Qy 1978 CATGATGCCCTTGTCAAAATAAAGCAAAAGAGTTGGAGTTGAAAATACTAGAAGCAATG 2037

Db 1981 CATGATGCCCTTGTGCAAAATAATAAGCAAGAGGTTGGAGTTGAAAATACTAGAAGCAATG 2040
Qy 2038 AAAACCCCTGGCCACTTTAAAAAGAGAAAAAGCGTTACCTTTCAGGNATATTTGGTCAATA 2094
Db 2041 AAAACCCCTGGCCACTTTAAAAAGAGAAAAAGCGTTACCTTTCAGGNATATTTGGTCAATA 2097
RESULT 5
US-09-371-347-24
; Sequence 24, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-24
Query Match 99.4%; Score 2081; DB 10; Length 3259;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 2094; Conservative 0; Mismatches 0; Indels 3; Gaps 1;
Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGAGCAGCAAGGCCATCGCAGAA 60
Db 80 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGAGCAGCAAGGCCATCGCAGAA 139
Qy 61 GAAATGTGTGAGCAAGCTGTGTTACATGATTTTCTGAGATCTTCACTGATTAGTAA 120
Db 140 GAAATGTGTGAGCAAGCTGTGTTACATGATTTTCTGAGATCTTCACTGATTAGTAA 199
Qy 121 TCCGATAGTATGACCTTAAACCCGAAACAGCTCCTCTGTTGTTGTTCTTACACAG 180
Db 200 TCCGATAGTATGACCTTAAACCCGAAACAGCTCCTCTGTTGTTGTTCTTACACAG 259
Qy 181 GGCAACCGGAGACCCACCGCACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 260 GGCAACCGGAGACCCACCGCACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 319
Qy 241 CTGCGGTTGATTTCTTTGCTCACCTGCGGTATGGTTACTGGGTCTCGGTGATTAGAA 300
Db 320 CTGCGGTTGATTTCTTTGCTCACCTGCGGTATGGTTACTGGGTCTCGGTGATTAGAA 379
Qy 301 TACACCTACTTTTCAATGGGGGAAGATATTCATAAACGACTTCAAGAGCTTGGAGCC 360
Db 380 TACACCTACTTTTCAATGGGGGAAGATATTCATAAACGACTTCAAGAGCTTGGAGCC 439
Qy 361 CGGATTTCTATGACACTGGACATGACATGCTGTGTAGGTTTAGAACTTGTGGTTGAG 420
Db 440 CGGATTTCTATGACACTGGACATGACATGCTGTGTAGGTTTAGAACTTGTGGTTGAG 499
Qy 421 CCGTGGATTTGCTGAGCTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 480
Db 500 CCGTGGATTTGCTGAGCTCTGGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 559
Qy 481 GAGGAGTAAGTGGCGCACTCCCGGTGCATCCTGTCATCTTTCAGGACAGACCTTGTG 540
Db 560 GAGGAGTAAGTGGCGCACTCCCGGTGCATCCTGTCATCTTTCAGGACAGACCTTGTG 619
Qy 541 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTAGGA 600

620 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 679
601 AGAAGAGATCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGTA 660
680 AGAAGGATCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGTA 739
661 ATTGAAGACTTTGAGTCTCACTTACCGTTCCGTTACCCCACTCTCAAGCCCTCTCTG 720
740 ATTGAAGACTTTGAGTCTCACTTACCGTTCCGTTACCCCACTCTCAAGCCCTCTCTG 799
721 AATATTCCTGGTTTACCCCAAGATATTTACAGGTACATCTGCAGAGTCTCTTGGCCAG 780
800 AATATTCCTGGTTTACCCCAAGATATTTACAGGTACATCTGCAGAGTCTCTTGGCCAG 859
781 GAGGAAGCCAAAGTATCTGTGACTTTCAGAGATCCAGTTTTCAGAGTCCCAATTTCAAAG 840
860 GAGGAAGCCAAAGTATCTGTGACTTTCAGAGATCCAGTTTTCAGAGTCCCAATTTCAAAG 919
841 GCAGTTCAACTTACTACCAATGATGCCATTAAGCACTCTGCTGGTAGAATTCGACATT 900
920 GCAGTTCAACTTACTACCAATGATGCCATTAAGCACTCTGCTGGTAGAATTCGACATT 979
901 TCAATACAGACTTTTCTATCAGGCTGAGATGCTTTCAGGCTGATCTGCCCTAACAGT 960
980 TCAATACAGACTTTTCTATCAGGCTGAGATGCTTTCAGGCTGATCTGCCCTAACAGT 1039
961 GATTCGAGGTACAAAGCTTACTCCAAAGACTGCAAGTTCAGATTAAGAGAGAGCACTGC 1020
1040 GATTCGAGGTACAAAGCTTACTCCAAAGACTGCAAGTTCAGATTAAGAGAGAGCACTGC 1099
1021 GTCCCTTTGAAATTAAGGCGAGACAAAGAGAAAGAGGAGTACCTTACCCAGCATATA 1080
1100 GTCCCTTTGAAATTAAGGCGAGACAAAGAGAAAGAGGAGTACCTTACCCAGCATATA 1159
1081 CCTCGGAGTGTCTCTCAGTTCAATTTTACCTGCTCTTGAATCGAGCAATTCCT 1140
1160 CCTCGGAGTGTCTCTCAGTTCAATTTTACCTGCTCTTGAATCGAGCAATTCCT 1219
1141 AAAAGGCAATTTTTCGAGCCCTTGTGACTATACAGTGCAGTGTGAAAGGCGCAGG 1200
1220 AAAAGGCAATTTTTCGAGCCCTTGTGACTATACAGTGCAGTGTGAAAGGCGCAGG 1279
1201 CTACAGGAGCTGTGAGTAAACAGGGGCGCGATTAAGCGCTTTGTAGAGATGCC 1260
1280 CTACAGGAGCTGTGAGTAAACAGGGGCGCGATTAAGCGCTTTGTAGAGATGCC 1339
1261 TGTGCTCTCTTGTGGATCT 1320
1340 TGTGCTCTCTTGTGGATCT 1399
1321 CTGCTCGAACATCTTCTCTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
1400 CTGCTCGAACATCTTCTCTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1459
1381 TTTCACCCAGGAAGCTCCATTTGCTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
1460 TTTCACCCAGGAAGCTCCATTTGCTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1519
1441 ACAGAGGTTCTGCGGAAGGGATGTACAGGCTGGCTGGCTGGCTGGCTGGCTGGCTGGCT 1500
1520 ACAGAGGTTCTGCGGAAGGGATGTATACAGGCTGGCTGGCTGGCTGGCTGGCTGGCTGG 1579
1501 CTTACGCAAAACATACATGCAATCCCATGAAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1560
1580 CTTACGCAAAACATACATGCAATCCCATGAAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1639
1561 TCCATCTCTCTCGAACAACAAATTTCTTTCACATTTACAGATGACCCCTCAATCCCAATC 1620
1640 TCCATCTCTCTCGAACAACAAATTTCTTTCACATTTACAGATGACCCCTCAATCCCAATC 1699
1621 ATAATGGTGGTTCAGGAACCGGCATAGCCCGCTTTATTTGGTTCCTTCAACATAGAGAG 1680
1700 ATAATGGTGGTTCAGGAACCGGCATAGCCCGCTTTATTTGGTTCCTTCAACATAGAGAG 1759

QY 1681 AAACCTCCAGAACCAACACCCAGATGGAATTTTGGAGCAATGTG---GTTTTTGGCTGC 1737
Db 1760 AAACCTCCAGAACCAACACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1819
QY 1738 AGGCATAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTTAAGCATGGG 1797
Db 1820 AGGCATAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTTAAGCATGGG 1879
QY 1798 ATCTTAACCTCATCTAAAGGTTTCTCTCAAGAGATGCTCTCTTGGGAGGAGGAAGCC 1857
Db 1880 ATCTTAACCTCATCTAAAGGTTTCTCTCAAGAGATGCTCTCTTGGGAGGAGGAAGCC 1939
QY 1858 CCAGCAAAAGTATGTACAAGACAAACATCCAGCTTCATGGCCAGCAGGTGGCGAGAAATCCTC 1917
Db 1940 CCAGCAAAAGTATGTACAAGACAAACATCCAGCTTCATGGCCAGCAGGTGGCGAGAAATCCTC 1999
QY 1918 CTCAGGAGAGACGGCCATATTTATGTGTGTGAGATGCAAAAGATATATGCGCAAGGATGTA 1977
Db 2000 CTCAGGAGAGACGGCCATATTTATGTGTGTGAGATGCAAAAGATATATGCGCAAGGATGTA 2059
QY 1978 CATGATGCCCTTGTGCAAAATTAAGCAAGAGGTTGAGTTGAAAACTAGAACCAATG 2037
Db 2060 CATGATGCCCTTGTGCAAAATTAAGCAAGAGGTTGAGTTGAAAACTAGAACCAATG 2119
QY 2038 AAAACCTCGCCACTTTTAAAAAGAAACCGCTACCTTCAGGATATTTGGTCTATA 2094
Db 2120 AAAACCTCGCCACTTTTAAAAAGAAACCGCTACCTTCAGGATATTTGGTCTATA 2176

RESULT 6

US-10-450-763-874
; Sequence 874, Application US/10450763
; Publication No. US20050196754A1
; GENERAL INFORMATION:
; APPLICANT: Hyseq, Inc
; TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
; FILE REFERENCE: 790CIEP3/US
; CURRENT APPLICATION NUMBER: US/10450763
; CURRENT FILING DATE: 2003-06-11
; PRIOR APPLICATION NUMBER: PCT/US01/08631
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/540,217
; PRIOR FILING DATE: 2000-03-31
; PRIOR APPLICATION NUMBER: 09/649,167
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 60736
; SOFTWARE: Custom
; SEQ ID NO 874
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SIMILAR
; LOCATION: (80)..(2173)
; OTHER INFORMATION: 100% homologous to Homo sapiens methionine synthase
; OTHER INFORMATION: reductase, accession number AF025794, Smith-Waterman Score=3624.
US-10-450-763-874

Query Match 99.4%; Score 2081; DB 24; Length 3259;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 2094; Conservative 0; Mismatches 0; Indels 3; Gaps 1;
QY 1 ATGAGGAGGTTCTGTTACTATATGCTACAGAGGAGGCAAGGCAAGCCATCCAGAA 60
Db 80 ATGAGGAGGTTCTGTTACTATATGCTACAGAGGAGGCAAGGCAAGCCATCCAGAA 139
QY 61 GAAATGTGTGAGCAAGCTGTGATGATGATTTCTCGAGATCTTCACTGTATTAGTGA 120
Db 140 GAAATGTGTGAGCAAGCTGTGATGATGATTTCTCGAGATCTTCACTGTATTAGTGA 199
QY 121 TCCGATAGTATGACCTTAAACCCGAAACAGCTCTCTTGTGTGTGTTTCTTACACG 180

Db 200 TCCGATAAGTATGACCTAAAAACCGAAACAGCTCCTCTTGTGTGTGTGTCTTACCAAG 259
Qy 181 GGCAACCGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAAACCAACA 240
Db 260 GGCAACCGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAAACCAACA 319
Qy 241 CTGCGGGTTGATTCTTTCTGCTCACCTGGGTATGGGTACTGGGTCTCGGTGATTTCAGAA 300
Db 320 CTGCGGGTTGATTCTTTCTGCTCACCTGGGTATGGGTACTGGGTCTCGGTGATTTCAGAA 379
Qy 301 TACACCTACTTTTCCAAATGGGGGAAGATAAATGATAAACAACCTTCAAGAGCTTTGGAGCC 360
Db 380 TACACCTACTTTTCCAAATGGGGGAAGATAAATGATAAACAACCTTCAAGAGCTTTGGAGCC 439
Qy 361 CGGCAATTTCTATGACACTGGACATGCAGATCACTGTGTAGTGTAGAACTTTGTGGTTGAG 420
Db 440 CGGCAATTTCTATGACACTGGACATGCAGATCACTGTGTAGTGTAGAACTTTGTGGTTGAG 499
Qy 421 CCGTGGATTGTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA 480
Db 500 CCGTGGATTGTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA 559
Qy 481 GAGGAGATAAGTGGCGCATCCCGGTGGCATCACTGCATCCTTGAGGACAGACCTTTGTG 540
Db 560 GAGGAGATAAGTGGCGCATCCCGGTGGCATCACTGCATCCTTGAGGACAGACCTTTGTG 619
Qy 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGACTTCTGAGATTCGATGATTCAGGA 600
Db 620 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGACTTCTGAGATTCGATGATTCAGGA 679
Qy 601 AGAAAGGATTCTGAGGTTTCAAGCAAAATCSAGTGAACAGCAACCAATCCAAATGTTGTA 660
Db 680 AGAAAGGATTCTGAGGTTTCAAGCAAAATCSAGTGAACAGCAACCAATCCAAATGTTGTA 739
Qy 661 ATTGAAGACTTTGAGTCTCTCACTTACCCGTTTCGGTACCCCACTCTCAAGAGCTCTCTG 720
Db 740 ATTGAAGACTTTGAGTCTCTCACTTACCCGTTTCGGTACCCCACTCTCAAGAGCTCTCTG 799
Qy 721 AATATTCCTGTTTACCCCAAGATATTTACAGGTACATCTGCGAGGATCTCTGGCCAG 780
Db 800 AATATTCCTGTTTACCCCAAGATATTTACAGGTACATCTGCGAGGATCTCTGGCCAG 859
Qy 781 GAGGAAAGCCAAAGTATCTGACCTTCAAGCAGATCCAGTTTTCAGAGTCCCAATTTCAAAG 840
Db 860 GAGGAAAGCCAAAGTATCTGACCTTCAAGCAGATCCAGTTTTCAGAGTCCCAATTTCAAAG 919
Qy 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTGAATTTGACACATT 900
Db 920 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTGAATTTGACACATT 979
Qy 901 TCAAAATACAGACTTTTCTCTATCAGCTGGAGATGCCTTTCAGGCTGATCTGCCCTAACAGT 960
Db 980 TCAAAATACAGACTTTTCTCTATCAGCTGGAGATGCCTTTCAGGCTGATCTGCCCTAACAGT 1039
Qy 961 GATTCGAGGTACAAAGCCCTACTCCAAAGACTGCAGCTTGAAGATAAAGAGAGACACTGC 1020
Db 1040 GATTCGAGGTACAAAGCCCTACTCCAAAGACTGCAGCTTGAAGATAAAGAGAGACACTGC 1099
Qy 1021 GTCCCTTTTGAATAAAGCGACACACAAAGAGAAAGGAGCTTACCTTACCCAGCATATA 1080
Db 1100 GTCCCTTTTGAATAAAGCGACACACAAAGAGAAAGGAGCTTACCTTACCCAGCATATA 1159
Qy 1081 CCTCGGGAATGTTCTCTCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Db 1160 CCTCGGGAATGTTCTCTCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1219
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Db 1220 AAAAGGCAATTTTTCGAGCCCTTGTGACTATACAGTGACGTGCTGAAAGGCGCAGG 1279
Qy 1201 CTACAGGAGCTGTGAGTAAACAAGGGGCGAGCCGATATAGCCGCTTTGTACGAGATGCC 1260
Db 1280 CTACAGGAGCTGTGAGTAAACAAGGGGCGAGCCGATATAGCCGCTTTGTACGAGATGCC 1339

Qy 1261 TGTGCTGCTGTTGTGGATCTCCTCCTCGCTTCCCTTCCCTTCCAGCCACCACTCAGTCTC 1320
Db 1340 TGTGCTGCTGTTGTGGATCTCCTCCTCGCTTCCCTTCCCTTCCAGCCACCACTCAGTCTC 1399
Qy 1321 CTGCTCGAAACATCTTCCCTAAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1400 CTGCTCGAAACATCTTCCCTAAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1459
Qy 1381 TTTTCCACCCAGAAAGCTCCATTTTGTCTTCAACATTTGTGTGAAATTTCTGTCTACTGCCACA 1440
Db 1460 TTTTCCACCCAGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1519
Qy 1441 ACAGAGGTTCTGCGGAAGGAGTATGTACAGGCTGGCTTGGCTTGTGTGCTTTCAGTT 1500
Db 1520 ACAGAGGTTCTGCGGAAGGAGTATGTACAGGCTGGCTTGGCTTGTGTGCTTTCAGTT 1579
Qy 1501 CTTTCCAGCAAAACATACATATCCATCCATGAAGACAGCGGGAAGCCCTGGCTCTCTAAGATA 1560
Db 1580 CTTTCCAGCAAAACATACATATCCATCCATGAAGACAGCGGGAAGCCCTGGCTCTCTAAGATA 1639
Qy 1561 TCCATCTCTCTCGAAACAAACAAATTTCTTCCATTCACAGATGACCCCTCAATCCCCATC 1620
Db 1640 TCCATCTCTCTCGAAACAAACAAATTTCTTCCATTCACAGATGACCCCTCAATCCCCATC 1699
Qy 1621 ATATGCTGGGTCCAGGAACCGGCATAGCCCGTTTATTTGGGTTCCCTACACATAGAGAG 1680
Db 1700 ATATGCTGGGTCCAGGAACCGGCATAGCCCGTTTATTTGGGTTCCCTACACATAGAGAG 1759
Qy 1681 AAATCCCAAGAAACACACCCAGATGGAATTTTTCGAGCAATGTG---GTTTTTGGCTGC 1737
Db 1760 AAATCCCAAGAAACACACCCAGATGGAATTTTTCGAGCAATGTGTGTTTTTGGCTGC 1819
Qy 1738 AGGCAATAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1797
Db 1820 AGGCAATAGGATAGGATATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1879
Qy 1798 ATCTTAACTCATATAAGGTTTCTCTTCAAGAGATGCTCCTGTTGGGGAGGAGGAAGCC 1857
Db 1880 ATCTTAACTCATATAAGGTTTCTCTTCAAGAGATGCTCCTGTTGGGGAGGAGGAAGCC 1939
Qy 1858 CCAGCAAAAGTATGTACAGACAAACATCCAGCTTTCATGCGCCAGAGGTGGCGAGAAATCCTC 1917
Db 1940 CCAGCAAAAGTATGTACAGACAAACATCCAGCTTTCATGCGCCAGAGGTGGCGAGAAATCCTC 1999
Qy 1918 CTCAGAGAAACGGCCATATTTTATGTGTGGAGATGCAAAAGATATAGCCCAAGATGTA 1977
Db 2000 CTCAGAGAAACGGCCATATTTTATGTGTGGAGATGCAAAAGATATAGCCCAAGATGTA 2059
Qy 1978 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACTAGAAAGCAATG 2037
Db 2060 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAACTAGAAAGCAATG 2119
Qy 2038 AAAACCCCTGGCCACTTTAAAGAAAGAAAAACGCTACCTTTCAGGATATTTGGTCATAA 2094
Db 2120 AAAACCCCTGGCCACTTTAAAGAAAGAAAAACGCTACCTTTCAGGATATTTGGTCATAA 2176

RESULT 7

US-11-119-096-24

; Sequence 24, Application US/11119096

; Publication No. US20050191701A1

; GENERAL INFORMATION:

; APPLICANT: Gravel, Roy A,

; APPLICANT: Rozen, Rima

; APPLICANT: Leclerc, Daniel

; APPLICANT: Wilson, Aaron

; APPLICANT: Rosenblatt, David

; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE.

; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE

; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME

; FILE REFERENCE: 50004/003005

; CURRENT APPLICATION NUMBER: US/11/119,096

; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-24

Query Match 99.4%; Score 2081; DB 26; Length 3259;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 2094; Conservative 0; Mismatches 0; Indels 3; Gaps 1;
QY 1 ATGAGGAGTTCTCTTACTATATGCTACACAGGAGGACAGGCAAGGCCATCGCAGAA 60
DB 80 ATGAGGAGTTCTCTTACTATATGCTACACAGGAGGACAGGCAAGGCCATCGCAGAA 139
QY 61 GAAATGTGTGAGCAAGCTGTGTAATGGAATTTCTGAGATCTTCACTGATTAAGTAA 120
DB 140 GAAATGTGTGAGCAAGCTGTGTAATGGAATTTCTGAGATCTTCACTGATTAAGTAA 199
QY 121 TCCGATAGTATGACCTAAACCCAGACAGCTCTCTGTTGTTGTTGTTCTACACG 180
DB 200 TCCGATAGTATGACCTAAACCCAGACAGCTCTCTGTTGTTGTTGTTCTACACG 259
QY 181 GGCACCGAGACCCACCGACACAGCCGCAAGTTGTTAAGAAATACAGAACCAACA 240
DB 260 GGCACCGAGACCCACCGACACAGCCGCAAGTTGTTAAGAAATACAGAACCAACA 319
QY 241 CTGCGGTTGATTTCTTTGCTCACCCTGCGGTAAGGTTACTGGGTTCTCGGTGATTCAGAA 300
DB 320 CTGCGGTTGATTTCTTTGCTCACCCTGCGGTAAGGTTACTGGGTTCTCGGTGATTCAGAA 379
QY 301 TACACCTACTTTTGAAGTGGGGGAGATTAATGATAACGACTTCAAGAGCTTGGAGCC 360
DB 380 TACACCTACTTTTGAAGTGGGGGAGATTAATGATAACGACTTCAAGAGCTTGGAGCC 439
QY 361 CGGCATTTCTATGACACTGGACATGACATGACTGTAGGTTTATAGAACTTGTGTTGAG 420
DB 440 CGGCATTTCTATGACACTGGACATGACATGACTGTAGGTTTATAGAACTTGTGTTGAG 499
QY 421 CCGTGGATTTGCTGGAATCTGGCCAGCCCTCAGAAAGCATTTTATAGTCAAGCAGAGGACAA 480
DB 500 CCGTGGATTTGCTGGAATCTGGCCAGCCCTCAGAAAGCATTTTATAGTCAAGCAGAGGACAA 559
QY 481 GAGGAGATAAGTGGGCGACTCCCGTGGCATCACTGATCTTGGAGACAGACCTTGTG 540
DB 560 GAGGAGATAAGTGGGCGACTCCCGTGGCATCACTGATCTTGGAGACAGACCTTGTG 619
QY 541 AAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
DB 620 AAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 679
QY 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGA 660
DB 680 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGA 739
QY 661 ATTGAAGATTTGAGTCTCACTACCGTTGCGTACCCGCTCTCAAGCCCTCTCTG 720
DB 740 ATTGAAGATTTGAGTCTCACTACCGTTGCGTACCCGCTCTCAAGCCCTCTCTG 799
QY 721 AATATTCCTGTTTACCCCGCAAGATTTTACAGGTACATCTGCAAGGAGTCTCTTGGCCAG 780
DB 800 AATATTCCTGTTTACCCCGCAAGATTTTACAGGTACATCTGCAAGGAGTCTCTTGGCCAG 859

QY 781 GAGGAAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTCTTTTCAAGTGCCCAATTTCAAAG 840
DB 860 GAGGAAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTCTTTTCAAGTGCCCAATTTCAAAG 919
QY 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTGAATTTGACATTT 900
DB 920 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTGAATTTGACATTT 979
QY 901 TCAAAATACAGACTTTTCTTATCAGCCTGGAGATGCTTTCAGCGTGATCTGCCCTAACAGT 960
DB 980 TCAAAATACAGACTTTTCTTATCAGCCTGGAGATGCTTTCAGCGTGATCTGCCCTAACAGT 1039
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QY 1021 GTCTCTTTTGAATAAAGGCGACACAAAGAGAAAGGAGCTACCTTACCCAGCATATA 1080
DB 1100 GTCTCTTTTGAATAAAGGCGACACAAAGAGAAAGGAGCTACCTTACCCAGCATATA 1159
QY 1081 CTTGCGGATGTTCTCTCCAGTTCAATTTTACCTGCTGTTTGAATCCGAGCAATTCCT 1140
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DB 1220 AAAAAGGCAATTTTTCGAGCCCTTGTGCACTATACCACTGACAGTCTGAAAAGCGCAGG 1279
QY 1201 CTACAGGAGCTGTCAGTAAACAGAGGCGACCGCATTAATAGCGCTTTGTAGAGATGCC 1260
DB 1280 CTACAGGAGCTGTCAGTAAACAGAGGCGACCGCATTAATAGCGCTTTGTAGAGATGCC 1339
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DB 1340 TGTGCTCTTGTGTTGATCTCTCTCTGCTTTTCCCTTCTGCGCAGCCACCACTCAAGTCTC 1399
QY 1321 CTGCTCGAAATCTTTCTTAAACCTTCAACCCAGACCATATTCGTTGTCAGGCTCAAGTTTA 1380
DB 1400 CTGCTCGAAATCTTTCTTAAACCTTCAACCCAGACCATATTCGTTGTCAGGCTCAAGTTTA 1459
QY 1381 TTTCCACCCAGGAAAGCTCCTATTTGTTCTTCAACTTGTGGAATTTCTCTACTGCGCACA 1440
DB 1460 TTTCCACCCAGGAAAGCTCCTATTTGTTCTTCAACTTGTGGAATTTCTCTACTGCGCACA 1519
QY 1441 ACAGAGGTTCTGCGGAGGAGATGTACAGGCTGGCTGGCTTGTGTTGTTGTTTCAAGTT 1500
DB 1520 ACAGAGGTTCTGCGGAGGAGATGTACAGGCTGGCTGGCTTGTGTTGTTGTTTCAAGTT 1579
QY 1501 CTTGAGCCAAACATACATGATCCCATGAAGACAGAGCGGAAAGCCCTGGCTCTTAAGATA 1560
DB 1580 CTTGAGCCAAACATACATGATCCCATGAAGACAGAGCGGAAAGCCCTGGCTCTTAAGATA 1639
QY 1561 TCCATCTCTCTCGAACAACAATTTCTTCCACTTACCAGATGACCCCTCAATCCCCATC 1620
DB 1640 TCCATCTCTCTCGAACAACAATTTCTTCCACTTACCAGATGACCCCTCAATCCCCATC 1699
QY 1621 ATAATGTTGGCTTCAGAGAAACCGGATAGCCCGCTTTATTTGGGTTCTTCAACATAGAGAG 1680
DB 1700 ATAATGTTGGCTTCAGAGAAACCGGATAGCCCGCTTTATTTGGGTTCTTCAACATAGAGAG 1759
QY 1681 AAATCTCAAGAACCAACCCAGATGGAATTTTGGAGCAATGTG -- GTTTTTTGGCTGC 1737
DB 1760 AAATCTCAAGAACCAACCCAGATGGAATTTTGGAGCAATGTGTTGTTTTTGGCTGC 1819
QY 1738 AGGCATAGGATAGGATTTATCTTACAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1797
DB 1820 AGGCATAGGATAGGATTTATCTATTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1879
QY 1798 ATCTTAACTCATATAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGAGGAGAGGCC 1857
DB 1880 ATCTTAACTCATATAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGAGGAGAGGCC 1939
QY 1858 CCAGCAAGTATGTACAGACCAACATCCAGCTTTCATGGCCAGCAGGTTGGCGAATCTCTC 1917

Db	1501	CTTCAGGCCAAACATACATATGATCCATGAAAGACAGCGGGAAGCCCTGGCTCCTTAAGATA	1560
Qy	1561	TCATCTCTCTCGAACAAACAAATTCCTTCCACTTACAGATGACCCCTCAATCCCCATC	1620
Db	1561	TCATCTCTCTCGAACAAACAAATTCCTTCCACTTACAGATGACCCCTCAATCCCCATC	1620
Qy	1621	ATAATGTGGTCCAGGAACCGGCATAGCCCCGTTTATTTGGTTTCTTACAAACATAGAG	1680
Db	1621	ATAATGTGGTCCAGGAACCGGCATAGCCCCGTTTATTTGGTTTCTTACAAACATAGAG	1680
Qy	1681	AAACTCCAAGAACCAACCCAGATGGAATTTTGGAGCAATGTG--GTTTTTGGCTGC	1737
Db	1681	AAACTCCAAGAACCAACCCAGATGGAATTTTGGAGCAATGTGTGTTTTTGGCTGC	1740
Qy	1738	AGGATAAGGATAGGGATATCTATTACAGAAAGAGCTCAGACATTTCCCTTAAGCATGGG	1797
Db	1741	AGGATAAGGATAGGGATATCTATTACAGAAAGAGCTCAGACATTTCCCTTAAGCATGGG	1800
Qy	1798	ATCTTAATCATCTAAAGGTTTCCTTCTCAAGAGATGCTCTGTGTGGGAGGAGAACCC	1857
Db	1801	ATCTTAATCATCTAAAGGTTTCCTTCTCAAGAGATGCTCTGTGTGGGAGGAGAACCC	1860
Qy	1858	CCAGCAAGTATGTACAAAGCAACATCCAGCTTCATGCCAGCAGGTGGCGAGATCCTC	1917
Db	1861	CCAGCAAGTATGTACAAAGCAACATCCAGCTTCATGCCAGCAGGTGGCGAGATCCTC	1920
Qy	1918	CTCCAGGAGAACGCCCATATTATGTGTGTGGAGATCAAAAGATATGGCCAAAGGATGTA	1977
Db	1921	CTCCAGGAGAACGCCCATATTATGTGTGTGGAGATCAAAAGATATGGCCAAAGGATGTA	1980
Qy	1978	CATGATGCCCTTGTGCAAAATAAAGCAAGAGAGTTGGAGTTGAAAACCTAGAAAGCAATG	2037
Db	1981	CATGATGCCCTTGTGCAAAATAAAGCAAGAGAGTTGGAGTTGAAAACCTAGAAAGCAATG	2040
Qy	2038	AAAACCTGGCCACTTTAAAGAGAAAGAGCTTACCTTCAGGATATTTGGTCATAA	2094
Db	2041	AAAACCTGGCCACTTTAAAGAGAAAGAGAGCTTACCTTCAGGATATTTGGTCATAA	2097
RESULT 9			
US-09-371-347-43			
; Sequence 43; Application US/09371347			
; Publication No. US20030082676A1			
; GENERAL INFORMATION:			
; APPLICANT: Roy A. Gravel et al.			
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:			
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE			
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER			
; FILE REFERENCE: 50004/003003			
; CURRENT APPLICATION NUMBER: US/09/371,347			
; CURRENT FILING DATE: 1999-08-10			
; PRIOR FILING DATE: 1998-01-16			
; PRIOR APPLICATION NUMBER: 60/071,622			
; PRIOR FILING DATE: 1999-01-15			
; NUMBER OF SEQ ID NOS: 51			
; SOFTWARE: FastSeq for Windows Version 4.0			
; SEQ ID NO 43			
; LENGTH: 2097			
; TYPE: DNA			
; ORGANISM: Homo sapiens			
US-09-371-347-43			
Query Match			
Best Local Similarity 99.3%; Score 2079.4; DB 10; Length 2097;			
Matches 2093; Conservative 0; Mismatches 1; Indels 3; Gaps 1;			
Qy	1	ATGAGGAGGTTTCGTGTACTATATGCTACACAGCAGGACAGGCAAGGCCATCGCGAA	60
Db	1	ATGAGGAGGTTTCGTGTACTATATGCTACACAGCAGGACAGGCAAGGCCATCGCGAA	60
Qy	61	GAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTCAGATCTTCACTGTATTAGTGAA	120

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RESULT 9
US-09-371-347-43
; Sequence 43; Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: ROY A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 43
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-43

Query Match      99.3%; Score 2079.4; DB 10; Length 2097;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 1; Indels 3; Gaps 1;

QY      1  ATGAGGAGGTTTCGTGTACTATATGCTACACAGCAGGCACAGGCAAAAGGCCATCGCAGAA 60
Db      1  ATGNGAGGTTTCGTGTACTATATGCTACACAGCAGGCACAGGCAAAAGGCCATCGCAGAA 60
QY      61  GAAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTGCAGCATCTTCACTATTAGTGAA 120

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Qy 1201 CTACAGAGCTGTCAGTAACAAAGGGGACGCCGATATAGCCGCTTTGTACGAGATGCC 1260
Db 1201 CTACAGAGCTGTCAGTAACAAAGGGGACGCCGATATAGCCGCTTTGTACGAGATGCC 1260
Qy 1261 TGTCCCTGCTGTTGGATCTCCTCCTCGCTTTCCTCTCTTCCGACGACCACTCAGTCTC 1320
Db 1261 TGTCCCTGCTGTTGGATCTCCTCCTCGCTTTCCTCTCTTCCGACGACCACTCAGTCTC 1320
Qy 1321 CTGCTCGAACAATCTTCTTAACTTCAACCCAGACCAATATTCGTGTGCAAGCTCAAGTTTA 1380
Db 1321 CTGCTCGAACAATCTTCTTAACTTCAACCCAGACCAATATTCGTGTGCAAGCTCAAGTTTA 1380
Qy 1381 TTTTACCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
Db 1381 TTTTACCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
Qy 1441 ACAGAGGTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGGCTTGTGTTGCTTCAAGTT 1500
Db 1441 ACAGAGGTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGGCTTGTGTTGCTTCAAGTT 1500
Qy 1501 CTTTCAGCAACAATACATGATCCCATGAAGACAGCGGAAAGCCCTGGCTCTCTAAGATA 1560
Db 1501 CTTTCAGCAACAATACATGATCCCATGAAGACAGCGGAAAGCCCTGGCTCTCTAAGATA 1560
Qy 1561 TCCATCTCTCTCGAACAACAAATTTCTTCCACTTACCAGATGACCCCTCAATCCCCATC 1620
Db 1561 TCCATCTCTCTCGAACAACAAATTTCTTCCACTTACCAGATGACCCCTCAATCCCCATC 1620
Qy 1621 ATATGTTGGGTTCAGGAACCGGATAGCCCGCTTTATTTGGGTTCTTCAACATAGAGAG 1680
Db 1621 ATATGTTGGGTTCAGGAACCGGATAGCCCGCTTTATTTGGGTTCTTCAACATAGAGAG 1680
Qy 1681 AAATCTCAAGAACAAACACCCAGATGGAATTTTGGAGCAATGTG ---GTTTTTGGCTGC 1737
Db 1681 AAATCTCAAGAACAAACACCCAGATGGAATTTTGGAGCAATGTGTTTTTGGCTGC 1740
Qy 1738 AGGATAAGGATAGGATATCTATTTCAGAAAAGCTCAGACATTTCTTAAAGCATGG 1797
Db 1741 AGGATAAGGATAGGATATCTATTTCAGAAAAGCTCAGACATTTCTTAAAGCATGG 1800
Qy 1798 ATCTTAATCTCATTAAGGTTTCTCTCAAGAGATGCTCTGTTGGGGAGGAGGAGGCC 1857
Db 1801 ATCTTAATCTCATTAAGGTTTCTCTCAAGAGATGCTCTGTTGGGGAGGAGGAGGCC 1860
Qy 1858 CCAGCAAGTATGTACAAGACAACTCCAGCTTTCATGGCCAGAGGTGGCGAGATCCTC 1917
Db 1861 CCAGCAAGTATGTACAAGACAACTCCAGCTTTCATGGCCAGAGGTGGCGAGATCCTC 1920
Qy 1918 CTCACGAGAACGGCCATATTTATGTGTGGAGATGCAAGAATATGGCCAGGATGTA 1977
Db 1921 CTCACGAGAACGGCCATATTTATGTGTGGAGATGCAAGAATATGGCCAGGATGTA 1980
Qy 1978 CATGATGCCCTGTGCAAAATATAGCAAGAGGTTGGAGTTGAAAACTAGAACAATG 2037
Db 1981 CATGATGCCCTGTGCAAAATATAGCAAGAGGTTGGAGTTGAAAACTAGAACAATG 2040
Qy 2038 AAAACCCCTGGCCACTTTAAAAGAAAGAAAACGCTACCTTCAGGATATTTGGTCATAA 2094
Db 2041 AAAACCCCTGGCCACTTTAAAAGAAAGAAAACGCTACCTTCAGGATATTTGGTCATAA 2097
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RESULT 10
US-11-119-096-41
; Sequence 41, Application US/11119096
; Publication No. US20050191701a1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
```

```
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-41
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Query Match 99.3%; Score 2079.4; DB 26; Length 2097;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 1; Indels 3; Gaps 1;

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Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 60
Db 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 60
Qy 61 GAAATGTGTGAGCAAGCTGTGTTACATGATTTTCTGCAGATCTTCACTGATTAGTAA 120
Db 61 GAAATGTGTGAGCAAGCTGTGTTACATGATTTTCTGCAGATCTTCACTGATTAGTAA 120
Qy 121 TCCGATAAGTATGACCTTAAACCCGAAACAGCTCCTCTTGTGTTGTTCTTACACAG 180
Db 121 TCCGATAAGTATGACCTTAAACCCGAAACAGCTCCTCTTGTGTTGTTCTTACACAG 180
Qy 181 GGCACCCGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGGAAATACAGAACCAACA 240
Db 181 GGCACCCGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGGAAATACAGAACCAACA 240
Qy 241 CTGCGGTTGATTTCTTGTCTCACTCGGTTATGGGTTACTCGGTTCTCGGTGATTGAG 300
Db 241 CTGCGGTTGATTTCTTGTCTCACTCGGTTATGGGTTACTCGGTTCTCGGTGATTGAG 300
Qy 301 TACACCTACTTTTGCATATGGGGGAGAAATATGATAAACGACTTCAAGAGCTTGGAGCC 360
Db 301 TACACCTACTTTTGCATATGGGGGAGAAATATGATAAACGACTTCAAGAGCTTGGAGCC 360
Qy 361 CGGCATTTCTATGACACTGGACATGCACTGCTGTAGGTTTAGAACTTGTGGTTGAG 420
Db 361 CGGCATTTCTATGACACTGGACATGCACTGCTGTAGGTTTAGAACTTGTGGTTGAG 420
Qy 421 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGGTCAAGCAGAGACAA 480
Db 421 CCGTGGATTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGGTCAAGCAGAGACAA 480
Qy 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACTGCAATCTTTGAGGACAGACCTTGTG 540
Db 481 GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACTGCAATCTTTGAGGACAGACCTTGTG 540
Qy 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTGAG 600
Db 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTGAG 600
Qy 601 AGAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGA 660
Db 601 AGAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGA 660
Qy 661 ATTGAAGACTTTGAGTCTCTCACTTACCCGTTGCGGTACCCCACTCTCTCAAGCCTCTCTG 720
Db 661 ATTGAAGACTTTGAGTCTCTCACTTACCCGTTGCGGTACCCCACTCTCTCAAGCCTCTCTG 720
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Qy	721	AAATATCTCGTGTAACTACCCCAAGAAATATTTACAGGTACATCTGCAGGAGTCTCTTTGGCCAG	780
Db	721	AAATATCTCGTGTAACTACCCCAAGAAATATTTACAGGTACATCTGCAGGAGTCTCTTTGGCCAG	780
Qy	781	GAGAAAGCCAAAGTATCTGTGACATTCAGCAGATCCAGTCTTTTCAAGTGCATTTTCAAG	840
Db	781	GAGAAAGCCAAAGTATCTGTGACATTCAGCAGATCCAGTCTTTTCAAGTGCATTTTCAAG	840
Qy	841	GCAGTTTCAACTTACTACGAATGATGCCATAAAACCACCTCTGCTGGTAGAATTTGACATTT	900
Db	841	GCAGTTTCAACTTACTACGAATGATGCCATAAAACCACCTCTGCTGGTAGAATTTGACATTT	900
Qy	901	TCAATACAGACTTTTCTCTATCAGCTGGAGATGCTTTCAGCGTGATCTGCCCTTAACAGT	960
Db	901	TCAATACAGACTTTTCTCTATCAGCTGGAGATGCTTTCAGCGTGATCTGCCCTTAACAGT	960
Qy	961	GATTTCTGAGGTACAAAGCTACTCCAAGACTGCGAGCTTGAAGATATAAAGAGACACTGC	1020
Db	961	GATTTCTGAGGTACAAAGCTACTCCAAGACTGCGAGCTTGAAGATATAAAGAGACACTGC	1020
Qy	1021	GTCCTTTTGAAATAAAGGCGCAGACACAAAGAAAGAGAGCTACTCTTACCCCGACATATA	1080
Db	1021	GTCCTTTTGAAATAAAGGCGCAGACACAAAGAAAGAGAGCTACTCTTACCCCGACATATA	1080
Qy	1081	CTCTCGGGAGTGTCTCTCCAGTTCATTTTTCACCTGGTGTCTTGAATTCGAGCAATTCCT	1140
Db	1081	CTCTCGGGAGTGTCTCTCCAGTTCATTTTTCACCTGGTGTCTTGAATTCGAGCAATTCCT	1140
Qy	1141	AAAAGGCAATTTTTCGAGCCCTTGTGGAGCTATACCAAGTGCAGTGTGAAAAGCGCAGG	1200
Db	1141	AAAAGGCAATTTTTCGAGCCCTTGTGGAGCTATACCAAGTGCAGTGTGAAAAGCGCAGG	1200
Qy	1201	CTACAGGAGCTGTGCAGTAAACAAGGGGCGACCGATATAGCCGCTTTGTACGAGATGCC	1260
Db	1201	CTACAGGAGCTGTGCAGTAAACAAGGGGCGACCGATATAGCCGCTTTGTACGAGATGCC	1260
Qy	1261	TGTGCTGCTTGTGTGGATCTCCTCTCGCTTTTCCCTTTTGCCAGCCACCACTCAGTCTC	1320
Db	1261	TGTGCTGCTTGTGTGGATCTCCTCTCGCTTTTCCCTTTTGCCAGCCACCACTCAGTCTC	1320
Qy	1321	CTGCTCGAATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA	1380
Db	1321	CTGCTCGAATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA	1380
Qy	1381	TTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGGAAATTTCTGTCTACTGCCACA	1440
Db	1381	TTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGGAAATTTCTGTCTACTGCCACA	1440
Qy	1441	ACAGAGTTTCTCGGAAGGGAGTATGTACAGCTGGCTGGCCCTTTGTTGGTTGCTCAGTT	1500
Db	1441	ACAGAGTTTCTCGGAAGGGAGTATGTACAGCTGGCTGGCCCTTTGTTGGTTGCTCAGTT	1500
Qy	1501	CTTCAGCCAAACATACATGCAATCCATGAAGACAGACGGGAAAGCCCTGGCTCTTAAGATA	1560
Db	1501	CTTCAGCCAAACATACATGCAATCCATGAAGACAGACGGGAAAGCCCTGGCTCTTAAGATA	1560
Qy	1561	TCCATCTCTCTCGAAACAAACAAATTTCTTTCCACTTACCAGATGACCCCTCAATCCCCATC	1620
Db	1561	TCCATCTCTCTCGAAACAAACAAATTTCTTTCCACTTACCAGATGACCCCTCAATCCCCATC	1620
Qy	1621	ATAATGTGGTCCAGGAACCGGCATAGCCCCGTTTATTTGGGTTCTCTACAAACATAGAGAG	1680
Db	1621	ATAATGTGGTCCAGGAACCGGCATAGCCCCGTTTATTTGGGTTCTCTACAAACATAGAGAG	1680
Qy	1681	AAACTCCAAGAACAAACCCAGATGGAAATTTTGAGCAATGTG---GTTTTTTGGCTGC	1737
Db	1681	AAACTCCAAGAACAAACCCAGATGGAAATTTTGAGCAATGTG---GTTTTTTGGCTGC	1740
Qy	1738	AGGCATAGGATAGGGATTATCTATTCAGAAAGCTCAGACATTTTCTTAAGCATGGG	1797
Db	1741	AGGCATAGGATAGGGATTATCTATTCAGAAAGAGCTCAGACATTTTCTTAAGCATGGG	1800
Qy	1798	ATCTTAATCTCTAAAGGTTTCTCTCTCAAGAGATGCTCTGTGTGGGAGGAGGAAGCC	1857

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RESULT 11
US-11-119-096-43
; Sequence 43, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
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; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 43
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-43

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	Query Match	99.3%	Score 2079.4	DB 26	Length 2097
	Best Local Similarity	99.8%	Pred. No. 0		
	Matches 2093	Conservative	0	Mismatches	1; Indels 3; Gaps 1;
Qy	1	ATGAGGAGGTTTCGTGTACTATATGCTACACAGCAGGACAGGCAAAAGGCCATCGCAGAA	60		
Db	1	ATGAGGAGGTTTCGTGTACTATATGCTACACAGCAGGACAGGCAAAAGGCCATCGCAGAA	60		
Qy	61	GAATGTGTGAGCAAGCTGTGGTACATPGGATTTTCTGCAGATCTTCACTGTATTAGTGAA	120		
Db	61	GAATGTGTGAGCAAGCTGTGGTACATPGGATTTTCTGCAGATCTTCACTATATTAGTGAA	120		
Qy	121	TCCGATAAGTATGACCTTAAAAACCGAAACAGCTCCTCTGTGTGTGTGGTGTCTTCAACCACG	180		
Db	121	TCCGATAAGTATGACCTTAAAAACCGAAACAGCTCCTCTGTGTGTGTGGTGTCTTCAACCACG	180		
Qy	181	GGCACCGGAGACCCACCCGACACAGCCCGAGGTTTGTTAAGGAAATACAGAACCAACA	240		
Db	181	GGCACCGGAGACCCACCCGACACAGCCCGAGGTTTGTTAAGGAAATACAGAACCAACA	240		
Qy	241	CTGCCGGTGTGATTTCTTTTGTCTACCTCGCGGTATGGGTACTCTGGGTCTCGGTGATTGAGAA	300		

QY	1	ATGAGGAGGTTTCTGTCTATATGCTACACAGCAGGGA	CAGGCAAAAGGCCATCGCAGAA	60
Db				
QY	94	ATGAGGAGGTTTCTGTCTATATGCTACACAGCAGGGA	CAGGCAAAAGGCCATCGCAGAA	153
Db				
QY	61	GAATGTGTGAGCAAGCTGTGGTACATGGAATTTTCTC	CAGATCTTCACTGTAATTAGTGAA	120
Db				
QY	154	GAATRTGTGAGCAAGCTGTGGTACATGGAATTTTCTC	CAGATCTTCACTGTAATTAGTGAA	213
Db				
QY	121	TCCGATAAGTATGACCTTAAACCCGAACAGCTCCTCT	TGTTGTGTGGTTTCTTACCACG	180
Db				
QY	214	TCCGATAAGTATGACCTTAAACCCGAACAGCTCCTCT	TGTTGTGTGGTTTCTTACCACG	273
Db				
QY	181	GGCACCAGGAGCCACCCGACACAGCCCGCAAGTTTGT	TAAAGNAATACAGAACCAACA	240
Db				
QY	274	GGCACCAGGAGCCACCCGACACAGCCCGCAAGTTTGT	TAAAGNAATACAGAACCAACA	333
Db				
QY	241	CTGCCGTTTGATTTCTTTTGCTCACCTCGCGGTATGG	GTATCTGGGTCTCGGTGATTCAGAA	300
Db				
QY	334	CTGCCGTTTGATTTCTTTTGCTCACCTCGCGGTATGG	GTATCTGGGTCTCGGTGATTCAGAA	393
Db				
QY	301	TACACCTACTTTTGCATATGGGGGAAGATAATTGAT	ATAACGACTTCAAGAGCTTTGGAGCC	360
Db				
QY	394	TACACCTACTTTTGCATATGGGGGAAGATAATTGAT	ATAACGACTTCAAGAGCTTTGGAGCC	453
Db				
QY	361	CGGCATTTCTATGACACTGGACATGACATGCTGTAG	GTGTTTGTAGAACTTGTGGTTGAG	420
Db				
QY	454	CGGCATTTCTATGACACTGGACATGACATGCTGTAG	GTGTTTGTAGAACTTGTGGTTGAG	513
Db				
QY	421	CCGTGGATTGTGGACTCTGGCCAGCCCTCAGAAAGCA	TATTAGTTCAGCAGAGGACAA	480
Db				
QY	514	CCGTGGATTGTGGACTCTGGCCAGCCCTCAGAAAGCA	TATTAGTTCAGCAGAGGACAA	573
Db				
QY	481	GAGGAGATAGTGGCGGCACTCCCGTGGGCATTCAGC	TGCATCTTTGAGGA	540
Db				
QY	574	GAGGAGATAAGTGGCGCACTCCCGTGGGCATCACCT	GATCTCTTGAGGA	633
Db				
QY	541	AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCG	AGCTTCTGAGATTCGATGATTCAGGA	600
Db				
QY	634	AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCG	AGCTTCTGAGATTCGATGATTCAGGA	693
Db				
QY	601	AGAAGGATTTCTGAGGTTTTGAAGCAAAATGCACTG	AACCAACCAATCCAATGTTGTA	660
Db				
QY	694	AGAAGGATTTCTGAGGTTTTGAAGCAAAATGCACTG	AACCAACCAATCCAATGTTGTA	753
Db				
QY	661	ATTGAAGACTTTGAGTCTCTCATTCACCGTTTGGTA	CCCCCACTCTCACAAGCCTCTCTG	720
Db				
QY	754	ATTGAAGACTTTGAGTCTCTCATTCACCGTTTGGTA	CCCCCACTCTCACAAGCCTCTCTG	813
Db				
QY	721	AATATTCCTGGTTTACCCCGCAGAATATTTACAGST	TACATCTGCAAGGAGTCTCTTGGCCAG	780
Db				
QY	814	AATATTCCTGGTTTACCCCGCAGAATATTTACAGST	TACATCTGCAAGGAGTCTCTTGGCCAG	873
Db				
QY	781	GAGGAAAGCCAAAGTATCTGTGACTTCAGCAGATCC	AGTTTTTCAAGTGCCAAATTTCAAAG	840
Db				
QY	874	GAGGAAAGCCAAAGTATCTGTGACTTCAGCAGATCC	AGTTTTTCAAGTGCCAAATTTCAAAG	933
Db				
QY	841	GCAGTTCAACTTACTACGAATGATGCCATAAACAAC	CACTCTGCTGGTAGAATTTGGACATT	900
Db				
QY	934	GCAGTTCAACTTACTACGAATGATGCCATAAACAAC	CACTCTGCTGGTAGAATTTGGACATT	993
Db				
QY	901	TCAATACAGACTTTTCTCTATCAGCCTGGAGATGCC	TTTTCAGCGGTGATCTGCCCTTAAACAGT	960
Db				
QY	994	TCAATACAGACTTTTCTCTATCAGCCTGGAGATGCC	TTTTCAGCGGTGATCTGCCCTTAAACAGT	1053
Db				
QY	961	GATTCTCAGGTACAAAGCCTACTCCAAAGACTGCACT	TGAGATATAAAGAGAGCACTGC	1020
Db				
QY	1054	GATTCTCAGGTACAAAGCCTACTCCAAAGACTGCACT	TGAGATATAAAGAGAGCACTGC	1113
Db				
QY	1021	GTCCCTTTTGAATAAAGGCGACACAAAGAAAGAGAG	GCTACCTTACCCAGCATATA	1080
Db				
QY	1114	GTCCCTTTTGAATAAAGGCGACACAAAGAAAGAGAG	GCTACCTTACCCAGCATATA	1173
Db				

Qy	1081	CCTGCGGGATGTTCTCTCCAGTTTCATTTTACCTGGTGTCTTGAATTCGAGCAATTCCT	1144
Db	1174	CCTGCGGGATGTTCTCTCCAGTTTCATTTTACCTGGTGTCTTGAATTCGAGCAATTCCT	1233
Qy	1141	AAAAAGCATTTTTCGAGCCCTTGTGGACTATACAGATGACAGTGTCTGAAAAGCGCAGG	1200
Db	1234	AAAAAGCATTTTTCGAGCCCTTGTGGACTATACAGTGAAGTGTCTGAAAAGCGCAGG	1293
Qy	1201	CTACAGGAGCTGTGCAGTAAACAAGGGGAGCCGATATATAGCCGCTTTGTGACGAGATGCC	1260
Db	1294	CTACAGGAGCTGTGCAGTAAACAAGGGGAGCCGATATATAGCYGCTTTGTGACGAGATGCC	1353
Qy	1261	TGTGCTGCTGTGTGGATCTCTCCTCGCTTTCCCTCTTGTGCCAGCCACACCTCAGTCTC	1320
Db	1354	TGTGCTGCTGTGTGGATCTCTCCTCGCTTTCCCTCTTGTGCCAGCCACACCTCAGTCTC	1413
Qy	1321	CTGCTGAAACATCTTCTTAAACTTCAACCCAGACCATATTTCTGTGTGCAAGCTCAAGTTTA	1380
Db	1414	CTGCTGAAACATCTTCTTAAACTTCAACCCAGACCATATTTCTGTGTGCAAGCTCAAGTTTA	1473
Qy	1381	TTTTCACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA	1440
Db	1474	TTTTCACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA	1533
Qy	1441	ACAGAGTCTCTGCGGAAGGAGTATGTACAGGCTGTGCTGGCCCTTGTGTGGTGTCTCAGTT	1500
Db	1534	ACAGAGTCTCTGCGGAAGGAGTATGTACAGGCTGTGCTGGCCCTTGTGTGGTGTCTCAGTT	1593
Qy	1501	CTTCAGCCAAACATACATGTCATCCCATGAAGACAGCGGGGAAGCCCTTGGCTCTTAAGATA	1560
Db	1594	CTTCAGCCAAACATACATGTCATCCCATGAAGACAGCGGGGAAGCCCTTGGCTCTTAAGATA	1653
Qy	1561	TCCATCTCTCTCGAACCAAAATTTCTTTCCACTTACCAGATGACCCCTCAATCCCCATC	1620
Db	1654	TCCATCTCTCTCGAACCAAAATTTCTTTCCACTTACCAGATGACCCCTCAATCCCCATC	1713
Qy	1621	ATAATGTGGGTCCAGAACCGGCATAGCCCCGTTTATTTGGGTCTCTACAAATAGAGAG	1680
Db	1714	ATAATGTGGGTCCAGAACCGGCATAGCCCCGTTTATTTGGGTCTCTACAAATAGAGAG	1773
Qy	1681	AAACTCCAGAACCAACCCAGATGGAAATTTTGGAGCAATGTG--GTTTTTGGCTGC	1737
Db	1774	AAACTCCAGAACCAACCCAGATGGAAATTTTGGAGCAATGTGGTGTGTTTTTGGCTGC	1833
Qy	1738	AGGCATAGGATAGGGAATTAATCTATTACAGAAAGAGCTCAGACATTTTCTTAAGCATGGG	1797
Db	1834	AGGCATAGGATAGGGAATTAATCTATTACAGAAAGAGCTCAGACATTTTCTTAAGCATGGG	1893
Qy	1798	ATCTTAATCTCATCTTAAAGGTTTCCTTCTCAAGAGATGCTCCTGTGGGGAGGAGGAAGCC	1857
Db	1894	ATCTTAATCTCATCTTAAAGGTTTCCTTCTCAAGAGATGCTCCTGTGGGGAGGAGGAAGCC	1953
Qy	1858	CCAGCAAGATATGTACAAGACAACATCCAGCTTTCATGGCCAGCAGGTGGCGAGATCTCTC	1917
Db	1954	CCAGCAAGATATGTACAAGACAACATCCAGCTTTCATGGCCAGCAGGTGGCGAGATCTCTC	2013
Qy	1918	CTCAGAGAAACGGCCATATTTATGTGTGTGGAGATGCAAGAAATATGGCCCAAGGATGTA	1977
Db	2014	CTCAGAGAAACGGCCATATTTATGTGTGTGGAGATGCAAGAAATATGGCCCAAGGATGTA	2073
Qy	1978	CATGATGCCCTCTGTGCAAAATAAAGCAAGAGGTTTGGAGTTGAAAACTAGAAAGCAATG	2037
Db	2074	CATGATGCCCTCTGTGCAAAATAAAGCAAGAGGTTTGGAGTTGAAAACTAGAAAGCAATG	2133
Qy	2038	AAAAACCTCGGCCATCTTTAAAGAAAGAAAAACGCTACCTTCAGAGATATTTGGTCATAA	2094
Db	2134	AAAAACCTCGGCCATCTTTAAAGAAAGAAAAACGCTACCTTCAGAGATATTTGGTCATAA	2190

; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: MYOCARDIAL INFARCTION, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: C1001499
; CURRENT APPLICATION NUMBER: US/10/741.600
; CURRENT FILING DATE: 2003-12-22
; NUMBER OF SEQ ID NOS: 73997
; SOFTWARE: RastSeq for Windows Version 4.0
; SEQ ID NO 693
; LENGTH: 3274
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-741-600-693

Query Match 99.0%; Score 2072.6; DB 22; Length 3274;
Best Local Similarity 98.9%; Pred. No. 0;
Matches 2073; Conservative 21; Mismatches 0; Indels 3; Gaps 1;

Qy 1 ATGAGGAGGTTCTGTTACTATATGCTACAGAGGACAGGCAAGGCCATCGCAGAA 60
Db |||||

Qy 112 ATGAGGAGGTTCTGTTACTATATGCTACAGAGGACAGGCAAGGCCATCGCAGAA 171
Db |||||

Qy 61 GAAATGTTGTGAGCAAGCTGTGTACATGGAATTTCTGCAGATCTTCACTGTATTAGTCAA 120
Db |||||

Qy 172 GAAATRTGTGAGCAAGCTGTGTACATGGAATTTCTGCAGATCTTCACTGTATTAGTCAA 231
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Qy 121 TCCGATATAGTATGACCTTAAACCGAAACGAAACAGCTCTCTGTGTGTGTGTTCTTACCAAG 180
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Qy 232 TCCGATATAGTATGACCTTAAACCGAAACGAAACAGCTCTCTGTGTGTGTGTTCTTACCAAG 291
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Qy 181 GGCACCGAGACCCACCGCACAGCCGCAAGTTGTTAAGGAAATACAGAAACCAACA 240
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Qy 241 CTGCGGTTGATTTCTTTGCTCACCCTGCGGTATGGGTTACTGGGTTCTCGGTGATTCAGAA 300
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Db |||||

Qy 301 TACACCTACTTTTGGATGGGGGAGAAATATGATTAACGACTTCAAGAGCTTGGAGCC 360
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Qy 412 TACACCTACTTTTGGATGGGGGAGAAATATGATTAAGGACTTCAAGAGCTTGGAGCC 471
Db |||||

Qy 361 CGGATTTCTATGACCTGGACATGTCAGATGATGTTAGTGTAGAACTTGTGTTGAG 420
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Qy 472 CGGATTTCTATGACCTGGACATGTCAGATGATGTTAGTGTAGAACTTGTGTTGAG 531
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Qy 832 AATATTCCTGTTTACCCCAAGATTTTACAGGTACATCTGCGAGAGTCTCTTGGCCAG 891
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Db 892 GAGGAAAGCCCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTSCCAATTTCAAAG 951
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; Sequence 47, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 47
; LENGTH: 2093
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-47

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Best Local Similarity 99.7%; Pred. No. 0;
Matches 2090; Conservative 0; Mismatches 0; Indels 7; Gaps 2;

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GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

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(without alignments)
14554.251 Million cell updates/sec

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Perfect score: 2093
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Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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6: /cgn2_6/ptodata/1/ina/backfiles.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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1	2079	99.3	3259	3	US-09-318-448-23
2	2074.2	99.1	3242	4	US-09-949-016-4215
3	386.4	18.5	390	3	US-08-905-223-71
4	380.6	18.2	601	4	US-09-949-016-150019
5	379.4	18.1	35916	4	US-09-949-016-15957
6	379	18.1	601	4	US-09-949-016-150020
7	190.4	9.1	601	4	US-09-949-016-150037
8	188.8	9.0	601	4	US-09-949-016-150047
9	187.2	8.9	601	4	US-09-949-016-150048
10	186.4	8.9	601	4	US-09-949-016-150046
11	174.4	8.3	2475	4	US-09-566-921-88
12	155.2	7.4	601	4	US-09-949-016-150030
13	154.8	7.4	601	4	US-09-949-016-150031
14	130.8	6.2	244	4	US-09-471-276-495
15	128.6	6.1	601	4	US-09-949-016-150007
16	126.2	6.0	601	4	US-09-949-016-150029
17	123.4	5.9	601	4	US-09-949-016-150008
18	123.4	5.9	601	4	US-09-949-016-150055
19	121.4	5.8	601	4	US-09-949-016-150041
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21	99.4	4.7	601	4	US-09-949-016-150032
22	76	3.6	601	4	US-09-949-016-150018
23	64.6	3.1	4353	2	US-08-365-486A-18
24	64.6	3.1	4353	2	US-08-880-342-18
25	64.6	3.1	4780	3	US-08-365-486A-20
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28	64.6	3.1	4780	3	US-08-880-342-20	Sequence 20, Appl
29	59.8	2.9	5057	2	US-08-365-486A-12	Sequence 12, Appl
30	59.8	2.9	5057	3	US-08-880-342-12	Sequence 12, Appl
31	59.8	2.9	5108	1	US-07-642-002-1	Sequence 1, Appl
32	58.6	2.8	4079	4	US-09-016-434-1477	Sequence 1477, A
33	57.8	2.8	1292	4	US-09-270-767-10272	Sequence 10272, A
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41	52.8	2.5	13508	4	US-08-956-171E-120	Sequence 120, App
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45	48.4	2.3	3037	4	US-09-911-781-10	Sequence 10, Appl

ALIGNMENTS

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; Sequence 23, Application US/09318448
; Patent No. 6210950
; GENERAL INFORMATION:
; APPLICANT: Johnson, William G.
; APPLICANT: Stenroos, Edward S.
; TITLE OF INVENTION: METHODS FOR DIAGNOSING, PREVENTING, AND TREATING
; FILE REFERENCE: 601-1-057
; CURRENT APPLICATION NUMBER: US/09/318,448
; CURRENT FILING DATE: 1999-05-25
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 23
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-318-448-23

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500 CCCTGGATTGCTGACATCTGCGCAGCCCTCAGAAGCATTTTAGTCAAGCAGAGGACAA 559
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920 GCAGTTCAACTTACTACGAATGATGCCATAAAACCCTCTGCTGGTAGAATTCGACATT 979
901 TCAAAATACAGACTTTTCTATCAGCCTGGAGATCCCTTACGCGTATCTGCCCTTAAACAGT 960
980 TCAAAATACAGACTTTTCTATCAGCCTGGAGATCCCTTACGCGTATCTGCCCTTAAACAGT 1039
961 GATTCGAGGTACAAAGCCTACTCCNAAGACTGCAGCTTGAAGATAAAGAGAGCACTGC 1020
1040 GATTCGAGGTACAAAGCCTACTCCNAAGACTGCAGCTTGAAGATAAAGAGAGCACTGC 1099
1021 GTCCTTTTGAATAAAGGCGACACAAAGAAAGAGGAGTACCTTACCCCGACATATA 1080
1100 GTCCTTTTGAATAAAGGCGACACAAAGAAAGAGGAGTACCTTACCCCGACATATA 1159
1081 CCTCGGAGATTTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCTCT 1140
1160 CCTCGGAGATTTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATCCGAGCAATTCTCT 1219
1141 AAAAAGGCATTTTTCGAGGCCCTTGTGAGCTATACAGTGCAGTGTGAAAAGGCGAGG 1200
1220 AAAAAGGCATTTTTCGAGGCCCTTGTGAGCTATACAGTGCAGTGTGAAAAGGCGAGG 1279
1201 CTACAGAGCTGTGCAGTAAACAGAGGCGACCGATTATAGCCGCTTTGTACGAGATGCC 1260
1280 CTACAGAGCTGTGCAGTAAACAGAGGCGACCGATTATAGCCGCTTTGTACGAGATGCC 1339
1261 TGTGCTGCTTTGTTGGATCTCTCTCTGCTTTCCCTTCTTCCGACCCACCACTCAGTCTC 1320
1340 TGTGCTGCTTTGTTGGATCTCTCTCTGCTTTCCCTTCTTCCGACCCACCACTCAGTCTC 1399
1321 CTGCTCGAACATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
1400 CTGCTCGAACATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1459
1381 TTTCAACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTCTACTGCCACA 1440
1460 TTTCAACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTCTACTGCCACA 1519
1441 ACAGAGGTTCTCGCGAAGGAGTATGTACAGGCTGGCTGGCTTGTGTTGCTTCAGTT 1500
1520 ACAGAGGTTCTCGCGAAGGAGTATGTACAGGCTGGCTGGCTTGTGTTGCTTCAGTT 1579

1501 CTTCAGCCAAACATACATGTCATCCCATGAAGACAGCGGAAAGCCCTGGCTCCTTAAGATA 1560
1580 CTTCAGCCAAACATACATGTCATCCCATGAAGACAGCGGAAAGCCCTGGCTCCTTAAGATA 1639
1561 TCCATCTCTCCTCGAACAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC 1620
1640 TCCATCTCTCCTCGAACAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC 1699
1621 ATATGTTGGTTCAGGAACCGGATAGCCCGCTTTATTTGGTTCCTTACAAACAT----AG 1676
1700 ATATGTTGGTTCAGGAACCGGATAGCCCGCTTTATTTGGTTCCTTACAAACATAGAG 1759
1677 AAATCTCAAGAACAAACACCAGATGGAAATTTTGGAGCAATGTGTTGTTTGGCTGC 1736
1760 AAATCTCAAGAACAAACACCAGATGGAAATTTTGGAGCAATGTGTTGTTTGGCTGC 1819
1737 AGCATAAGGATAGGGAATTTATTTACAGAAAAGAGCTCAGACATTTCTTAAGCATGGG 1796
1820 AGCATAAGGATAGGGAATTTATTTACAGAAAAGAGCTCAGACATTTCTTAAGCATGGG 1879
1797 ATCTTAATCTCATTAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1856
1880 ATCTTAATCTCATTAAGGTTTCTTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1939
1857 CCAGCAAGTATGTACAAAGAACACATCCAGCTTCATCGCCAGCAGGTGGCGAGAATCCTC 1916
1940 CCAGCAAGTATGTACAAAGAACACATCCAGCTTCATCGCCAGCAGGTGGCGAGAATCCTC 1999
1917 CTCAGAGAAACGCCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAAAGATGTA 1976
2000 CTCAGAGAAACGCCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAAAGATGTA 2059
1977 CATGATGCCCTTGTGCAAAATAAAGCAAGAGTTTGAGTTGAAAACTAGAAGCAATG 2036
2060 CATGATGCCCTTGTGCAAAATAAAGCAAGAGTTTGAGTTGAAAACTAGAAGCAATG 2119
2037 AAAACCTCGGCCACTTTTAAAGAAAGAAACCGCTTACCTTCAGGATATTTGGTCAATA 2093
2120 AAAACCTCGGCCACTTTTAAAGAAAGAAACCGCTTACCTTCAGGATATTTGGTCAATA 2176

RESULT 2

US-09-949-016-4215
; Sequence 4215, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4215
; LENGTH: 3242
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-4215

Query Match 99.1%; Score 2074.2; DB 4; Length 3242;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 2090; Conservative 0; Mismatches 3; Indels 4; Gaps 1;
Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGAGGACGAAAGGCATCGCAGAA 60
|||||


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; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15957
; LENGTH: 35916
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-15957

```

Query Match	18.18	Score 379.4	DB 4	Length 35916
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Best Local Similarity 99.7%; Pred. No. 1.4e-116;

Matches	380	Conservative	0	Mismatches	1	Indels	0	Gaps	0
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Qy	401	GTTTAGAACTTGTGGTTGAGCCGTGGATTCGTGGACTCTGGCCAGCCCTCAGAAGCAATT	460
Db	10781	GTTTAGAACTTGTGGTTGAGCCGTGGATTCGTGGACTCTGGCCAGCCCTCAGAAGCAATT	10840
Qy	461	TTAGGTCAAAGCAGAGCAAGAAGGAGATAAGTGGCGCACTCCCGGTGGCATTCACTGCAT	520
Db	10841	TTAGGTCAAAGCAGAGCAAGAAGGAGATAAGTGGCGCACTCCCGGTGGCATTCACTGCAT	10900
Qy	521	CCTTGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCAAAGTCGAGCTTC	580
Db	10901	CCTCGAGGACAGACCTTGTGAAGTCAGAGCTGCTACACATTGAATCTCAAAGTCGAGCTTC	10960
Qy	581	TGAGATTCGATGATTCAGGAAGAAGGATCTTGAGGTTTGAAGCAAAATGCGAGTGAACA	640
Db	10961	TGAGATTCGATGATTCAGGAAGAAGGATCTTGAGGTTTGAAGCAAAATGCGAGTGAACA	11020
Qy	641	GCAACCAATCCAAATGTTGTAATTGAAGACTTTGAGTCCTCACTTACCCGGTTCGGTACCCC	700
Db	11021	GCAACCAATCCAAATGTTGTAATTGAAGACTTTGAGTCCTCACTTACCCGGTTCGGTACCCC	11080
Qy	701	CACCTCTCACAAGCCTCTCTGGAATATTCTCTGGTTTACCCGCCGAATATTTACAGGTACATC	760
Db	11081	CACCTCTCACAAGCCTCTCTGGAATATTCTCTGGTTTACCCGCCGAATATTTACAGGTACATC	11140
Qy	761	TGCAGGAGTCTCTTGGCCAGG	781
Db	11141	TGCAGGAGTCTCTTGGCCAGG	11161

RESULT 6

US-09-949-016-150020
; Sequence 150020, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:

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; CURRENT INVENTION.
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016

```

Query Match

Best Local Similarity 99.5%; Pred. No. 8e-118;		Matches 379; Conservative		1; Mismatches		1; Indels		0; Gaps		0;	
Qy	401	GT	TTAGAAC	TT	GTGGTTGAGCCG	TG	ATGCTGGACT	TG	CGCCAGAGCCCTCAGAAAGCATT	460	
Db	165	GT	TTAGAAC	TT	GTGGTTGAGCCG	TG	ATGCTGGACT	TG	CGCCAGAGCCCTCAGAAAGCATT	224	
Qy	461	TT	AGGTC	CA	AGCAGAGCA	CA	AGAGGAGAT	AA	GTGGCGCACTCCG	GTGGCATCACCTGCAT	520
Db	225	TT	AGGTC	CA	AGCAGAGCA	CA	AGAGGAGAT	AA	GTGGCGCACTCCG	GTGGCATCACCTGCAT	284
Qy	521	CT	TTGAGGACAGAC	CT	TTGTGAAGTCA	AG	CTGCTGCTACACAT	TG	GAATCTCAAGTCGAGCTTC	580	
Db	285	CT	CGAGGACAGAC	CT	GTGTGAAGTCA	AG	CTGCTGCTACACAT	TG	GAATCTCAAGTCGAGCTTC	344	
Qy	581	TG	AGATTCGATG	ATT	CAGGNAGAAAGG	ATT	CTGAGGCTTTTGAGC	AAATTCGAGTGAACA	640		
Db	345	TG	AGATTCGATG	ATT	CAGGAAGAAAGG	ATT	CTGAGGCTTTTGAGC	AAATTCGAGTGAACA	404		
Qy	641	GCA	ACCAATCCA	ATGTTGTA	ATTGAAGAC	TTTTCGAGT	CTC	CAC	TTACCCGTTCCG	TACCCC	700
Db	405	GCA	ACCAATCCA	ATGTTGTA	ATTGAAGAC	TTTTCGAGT	CTC	CAC	TTACCCGTTCCG	TACCCC	464
Qy	701	CAC	TTCTACAAG	CTCTCTG	AAATATTTCTTG	GGTTTAC	CCCCCAG	AAATATTTAC	AGGTACATC	760	
Db	465	CAC	TTCTACAAG	CTCTCTG	AAATATTTCTTG	GGTTTAC	CCCCCAG	AAATATTTAC	AGGTACATC	524	
Qy	761	TG	CAGAGTCTCT	TTGGCCAGG	781						
Db	525	TG	CAGAGTCTCT	TTGGCCAGG	545						

RESULT 7

US-09-949-016-150037
; Sequence 150037, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:

/ APPLICANT: VENTER, J. Craig et al.
 / TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
 / TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
 / FILE REFERENCE: CL001307
 / CURRENT APPLICATION NUMBER: US/09/949,016
 / CURRENT FILING DATE: 2000-04-14
 / PRIOR APPLICATION NUMBER: 60/241,755
 / PRIOR FILING DATE: 2000-10-20
 / PRIOR APPLICATION NUMBER: 60/237,768
 / PRIOR FILING DATE: 2000-10-03
 / PRIOR APPLICATION NUMBER: 60/231,498
 / PRIOR FILING DATE: 2000-09-08
 / NUMBER OF SEQ ID NOS: 207012
 / SOFTWARE: FastSeq for Windows Version 4.0
 / SEQ ID NO 150037

Query Match 9.1%; Score 190.4; DB 4; Length 601;

Best Local Similarity 99.5%; Pred. No. 1.3e-53;
Matches 191: Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy	1369	AGCTCAAGTTTATTTTCCACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTG	1428
Db	18	AGCTCAAGTTTATTTTCCACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTG	77
Qy	1429	TCTACTGCCACAACAGAGGTTCTGCCGAAGGGAGTATGTACAGGCTGGCTTGTTG	1488
Db	78	TCTACTGCCACAACAGAGGTTCTGCCGAAGGGAGTATGTACAGGCTGGCTTGTTG	137
Qy	1489	GTTGCTTCAGTCTTTCAGCCAAACATACATGCTCCATGGAAGACGCGGGAAAGCCCTG	1548
Db	138	GTTGCTTCAGTCTTTCAGCCAAACATACATGCTCCATGGAAGACGCGGGAAAGCCCTG	197

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QY 1549 GCTCCTAAGATA 1560
    |||||
Db 198 GTCCTAAGGTA 209

RESULT 8
US-09-949-016-150047
; Sequence 150047, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150047
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
; US-09-949-016-150047

Query Match      9.0%; Score 188.8; DB 4; Length 601;
Best Local Similarity 93.3%; Pred. No. 4.7e-53;
Matches 196; Conservative 1; Mismatches 13; Indels 0; Gaps 0;

QY 1761 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 1820
    |||||
Db 191 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 250

QY 1821 TTCTCAAGAGATGCTCTGTGGGAGGAGAGAGCCAGCAAGATATGTACAGACAAC 1880
    |||||
Db 251 TTCTCAAGAGATGCTCTGTGGGAGGAGAGAGCCAGCAAGATATGTACAGACAAC 310

QY 1881 ATCCAGCTTTCATGCGCAGAGTGGCGAGAAATCTCTCCAGGAGAAAGCGGCATATTTAT 1940
    |||||
Db 311 ATCCAGCTTTCATGCGCAGAGTGGCGAGAAATCTCTCCAGGAGAAAGCGGCATATTTAT 370

QY 1941 GTGTGTGGAGATGCAAGAATATGCCCCAAG 1970
    |||||
Db 371 GTGTGTGGAGTCAATTATCGTGCCTAAG 400

RESULT 9
US-09-949-016-150048
; Sequence 150048, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150048
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
; US-09-949-016-150048

Query Match      8.9%; Score 186.4; DB 4; Length 601;
Best Local Similarity 99.5%; Pred. No. 3.1e-52;
Matches 187; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1761 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 1820
    |||||
Db 413 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 472

QY 1821 TTCTCAAGAGATGCTCTGTGGGAGGAGAGAGCCAGCAAGATATGTACAGACAAC 1880
    |||||
Db 473 TTCTCAAGAGATGCTCTGTGGGAGGAGAGAGCCAGCAAGATATGTACAGACAAC 532

QY 1881 ATCCAGCTTTCATGCGCAGAGTGGCGAGAAATCTCTCCAGGAGAAAGCGGCATATTTAT 1940
    |||||
Db 533 ATCCAGCTTTCATGCGCAGAGTGGCGAGAAATCTCTCCAGGAGAAAGCGGCATATTTAT 592

QY 1941 GTGTGTGG 1948
    |||||
Db 593 GTGTGTGG 600

RESULT 11
US-09-566-921-88
; Sequence 88, Application US/09566921
```

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; ORGANISM: Human
US-09-949-016-150048

Query Match      8.9%; Score 187.2; DB 4; Length 601;
Best Local Similarity 92.9%; Pred. No. 1.6e-52;
Matches 195; Conservative 1; Mismatches 14; Indels 0; Gaps 0;

QY 1761 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 1820
    |||||
Db 155 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 214

QY 1821 TTCTCAAGAGATGCTCTGTGGGAGGAGAGAGCCAGCAAGATATGTACAGACAAC 1880
    |||||
Db 215 TTCTCAAGAGATGCTCTGTGGGAGGAGAGAGCCAGCAAGATATGTACAGACAAC 274

QY 1881 ATCCAGCTTTCATGCGCAGAGTGGCGAGAAATCTCTCCAGGAGAAAGCGGCATATTTAT 1940
    |||||
Db 275 ATCCAGCTTTCATGCGCAGAGTGGCGAGAAATCTCTCCAGGAGAAAGCGGCATATTTAT 334

QY 1941 GTGTGTGGAGATGCAAGAATATGCCCCAAG 1970
    |||||
Db 335 GTGTGTGGAGTCAATTATCGTGCCTAAG 364

RESULT 10
US-09-949-016-150046
; Sequence 150046, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150046
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
; US-09-949-016-150046

Query Match      8.9%; Score 186.4; DB 4; Length 601;
Best Local Similarity 99.5%; Pred. No. 3.1e-52;
Matches 187; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1761 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 1820
    |||||
Db 413 TTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGGGATCTTAACTCATCTAAAGGTTTCC 472

QY 1821 TTCTCAAGAGATGCTCTGTGGGAGGAGAGAGCCAGCAAGATATGTACAGACAAC 1880
    |||||
Db 473 TTCTCAAGAGATGCTCTGTGGGAGGAGAGAGCCAGCAAGATATGTACAGACAAC 532

QY 1881 ATCCAGCTTTCATGCGCAGAGTGGCGAGAAATCTCTCCAGGAGAAAGCGGCATATTTAT 1940
    |||||
Db 533 ATCCAGCTTTCATGCGCAGAGTGGCGAGAAATCTCTCCAGGAGAAAGCGGCATATTTAT 592

QY 1941 GTGTGTGG 1948
    |||||
Db 593 GTGTGTGG 600

RESULT 11
US-09-566-921-88
; Sequence 88, Application US/09566921
```

```
Patent No. 6682888
GENERAL INFORMATION:
APPLICANT: Loring, Jeanne P.
APPLICANT: Tingley, Debora W.
APPLICANT: Edwards, Carla M.
TITLE OF INVENTION: GENES EXPRESSED IN ALZHEIMER'S DISEASE
FILE REFERENCE: PA-0024 US
CURRENT APPLICATION NUMBER: US/09/566,921
CURRENT FILING DATE: 2000-05-05
NUMBER OF SEQ ID NOS: 138
SOFTWARE: PERL Program
SEQ ID NO 88
LENGTH: 2475
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc feature
OTHER INFORMATION: Incyte ID No. 6682888 255828.26
NAME/KEY: unsure
LOCATION: 1001, 1011
OTHER INFORMATION: a, t, c, g, or other
US-09-566-921-88

Query Match      8.3%; Score 174.4; DB 4; Length 2475;
Best Local Similarity 96.7%; Pred. No. 1.1e-47;
Matches 178; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

Qy 510 ATCACTTCATCCTTGAGGACAGACCTTGTAAGTCAGAGCTGCTACACATTGAATCTCA 569
Db 1 ATCACTTCATCCTTGAGGACAGACCTTGTAAGTCAGAGCTGCTACACATTGAATCTCA 60

Qy 570 AGTCAGGCTCTTGAGATTGATGATTCAGGAAGAAAGGATTCTGAGGTTTTGAAGCAAAA 629
Db 61 AGTCAGGCTCTTGAGATTGATGATTCAGGAAGAAAGGATTCTGAGGTTTTGAAGCAAAA 120

Qy 630 TGCAGTGAACAGCACCAATCCATGTTGTAATTCGAAGACTTTGATCTCATTACCG 689
Db 121 TGCAGTGAACAGCAACCAATCCATGTTGTAATTCGAAGACTTTGATCTCATTACCG 180

Qy 690 TTCCG 693
Db 181 TTCCG 184

RESULT 12
US-09-949-016-150030
; Sequence 150030, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150030
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
; US-09-949-016-150030

Query Match      7.4%; Score 154.8; DB 4; Length 601;
Best Local Similarity 97.5%; Pred. No. 1.8e-41;
Matches 156; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 899 TTTCAAATACAGACTTTTCTATCAGCCTGAGATGCTTCAGCGTGATCTGCCCTAACA 958
Db 151 TCTAGAAATACAGACTTTTCTATCAGCCTGAGATGCTTCAGCGTGATCTGCCCTAACA 210

Qy 959 GTGATTCTGAGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGCACT 1018
Db 211 GTGATTCTGAGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGCACT 270

RESULT 13
US-09-949-016-150031
; Sequence 150031, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150031
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
; US-09-949-016-150031

Query Match      7.4%; Score 154.8; DB 4; Length 601;
Best Local Similarity 97.5%; Pred. No. 1.8e-41;
Matches 156; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 899 TTTCAAATACAGACTTTTCTATCAGCCTGAGATGCTTCAGCGTGATCTGCCCTAACA 958
Db 151 TCTAGAAATACAGACTTTTCTATCAGCCTGAGATGCTTCAGCGTGATCTGCCCTAACA 210

Qy 959 GTGATTCTGAGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGCACT 1018
Db 211 GTGATTCTGAGTACAAAGCCTACTCCAAAGACTGCAGCTTGAAGATAAAAGAGAGCACT 270

RESULT 14
US-09-471-276-495
; Sequence 495, Application US/09471276
; Patent No. 6822072
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Duclert A.
; APPLICANT: Giordano, J.Y.
; TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
; Patent No. 6822072
; FILE REFERENCE: GENSET.025CP1
; CURRENT APPLICATION NUMBER: US/09/471,276
; CURRENT FILING DATE: 1999-12-21
; EARLIER APPLICATION NUMBER: 09/057,719
; EARLIER FILING DATE: 1998-04-09
; EARLIER APPLICATION NUMBER: 09/069,047
; EARLIER FILING DATE: 1998-04-28
; EARLIER APPLICATION NUMBER: PCT/IB99/00712
```

; EARLIER FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 1622
; SOFTWARE: Patent.pm
; SEQ ID NO 495
; LENGTH: 244
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 70..243
; NAME/KEY: sig_peptide
; LOCATION: 70..114
; OTHER INFORMATION: Von Heijne matrix
; OTHER INFORMATION: score 4.4000009536743
; OTHER INFORMATION: seq RFLLYATQQQA/KA
US-09-471-276-495

Query Match 6.2%; Score 130.8; DB 4; Length 244;
Best Local Similarity 88.1%; Pred. No. 1.3e-33;
Matches 141; Conservative 1; Mismatches 18; Indels 0; Gaps 0;

Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 60
Db 70 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 129

Qy 61 GAATGTGTGAGCAAGCTGTGTCATCGATTTTCGAGATCTTCACTGTATTAGTGAA 120
Db 130 GAATGTGTGAGCAAGCTGTGTCATCGATTTTCGAGATCTTCACTGTATTAGTGAA 189

Qy 121 TCCGATAAGTATGACCTAAAAACCGAAACAGCTCCTCTTG 160
Db 190 TCCGATAAGGTCCTGGTGATTCAGAAATACACTACTTTTG 229

RESULT 15
US-09-949-016-150007
; Sequence 150007, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 150007
; LENGTH: 601
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-150007

Query Match 6.1%; Score 128.6; DB 4; Length 601;
Best Local Similarity 99.2%; Pred. No. 1.5e-32;
Matches 128; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGCAGGACAGGCAAGGCCATCGCAGAA 60
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Qy 61 GAATGTGTGAGCAAGCTGTGTCATCGATTTTCGAGATCTTCACTGTATTAGTGAA 120
Db 296 GAATGTGTGAGCAAGCTGTGTCATCGATTTTCGAGATCTTCACTGTATTAGTGAA 355

Qy 121 TCCGATAAG 129
Db 121 TCCGATAAG 129

Db 356 TCCGATAAG 364

Search completed: November 8, 2005, 17:00:55
Job time : 237.308 secs

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: November 8, 2005, 16:35:10 ; Search time 1121.01 Seconds
(without alignments)
15440.336 Million cell updates/sec

Title: US-09-371-347A-47

Perfect score: 2093

Sequence: 1 atgaggaggttctgtact.....ttcaggatatttggtcataa 2093

Scoring table:

IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 9794790 seqs, 4134909567 residues

Total number of hits satisfying chosen parameters: 19589580

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

- Published Applications NA:*
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 - 2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq.*
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 - 11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq.*
 - 12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq.*
 - 13: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq.*
 - 14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq.*
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 - 21: /cgn2_6/ptodata/1/pubpna/US10H_PUBCOMB.seq.*
 - 22: /cgn2_6/ptodata/1/pubpna/US10I_PUBCOMB.seq.*
 - 23: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq.*
 - 24: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq.*
 - 25: /cgn2_6/ptodata/1/pubpna/US11A_PUBCOMB.seq.*
 - 26: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq.*
 - 27: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq.*
 - 28: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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3	2079	99.3	2097	10	US-09-371-347-1
4	2079	99.3	2097	26	US-11-119-096-1
5	2079	99.3	3259	10	US-09-371-347-24

Sequence 874, App	Sequence 24, Appl	Sequence 41, Appl	Sequence 43, Appl	Sequence 43, Appl	Sequence 43, Appl	Sequence 692, App	Sequence 693, App	Sequence 45, Appl	Sequence 45, Appl	Sequence 17757, A	Sequence 6369, Ap	Sequence 1735, Ap	Sequence 20100, A	Sequence 15435, A	Sequence 758988, A	Sequence 827971, A	Sequence 873, App	Sequence 15583, A	Sequence 15584, A	Sequence 15589, A	Sequence 15590, A	Sequence 15592, A	Sequence 15594, A	Sequence 15598, A	Sequence 15600, A	Sequence 15606, A	Sequence 15609, A	Sequence 15610, A	Sequence 15612, A	Sequence 15614, A	Sequence 15620, A	Sequence 15621, A	Sequence 15623, A	Sequence 15629, A	Sequence 15630, A	Sequence 15631, A
Sequence 874, App	Sequence 24, Appl	Sequence 41, Appl	Sequence 43, Appl	Sequence 43, Appl	Sequence 43, Appl	Sequence 692, App	Sequence 693, App	Sequence 45, Appl	Sequence 45, Appl	Sequence 17757, A	Sequence 6369, Ap	Sequence 1735, Ap	Sequence 20100, A	Sequence 15435, A	Sequence 758988, A	Sequence 827971, A	Sequence 873, App	Sequence 15583, A	Sequence 15584, A	Sequence 15589, A	Sequence 15590, A	Sequence 15592, A	Sequence 15594, A	Sequence 15598, A	Sequence 15600, A	Sequence 15606, A	Sequence 15609, A	Sequence 15610, A	Sequence 15612, A	Sequence 15614, A	Sequence 15620, A	Sequence 15621, A	Sequence 15623, A	Sequence 15629, A	Sequence 15630, A	Sequence 15631, A

ALIGNMENTS

RESULT 1

US-09-371-347-47
; Sequence 47, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-15
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 47
; LENGTH: 2093
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-47

Query Match 100.0%; Score 2093; DB 10; Length 2093;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	1	ATGAGGAGTTCTGTCTATATGCTACACAGGAGCAGCAAGCCATCGAGAA	60
Db	1	ATGAGGAGTTCTGTCTATATGCTACACAGGAGCAGCAAGCCATCGAGAA	60
QY	61	GAAATGTGTGAGCAAGCTGTGGTACATGGAATTTCTGCAGATCTTCACTGTATAGTGAA	120
Db	61	GAAATGTGTGAGCAAGCTGTGGTACATGGAATTTCTGCAGATCTTCACTGTATAGTGAA	120
QY	121	TCCGATAAGTATGACCTTAAACCGGAACAGCTCCTCTTGTGTGTGTTTCTACACG	180
Db	121	TCCGATAAGTATGACCTTAAACCGGAACAGCTCCTCTTGTGTGTGTTTCTACACG	180
QY	181	GGCACCGGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA	240
Db	181	GGCACCGGAGACCCACCCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA	240
QY	241	CTGCCGTTGATTTCTTTGCTCACTCGGTATGGGTACTGGGTCTCGGTGATTCAGAA	300
Db	241	CTGCCGTTGATTTCTTTGCTCACTCGGTATGGGTACTGGGTCTCGGTGATTCAGAA	300
QY	301	TACACCTACTTTTGCAATGGGGGAAGATAATTTGATAAACGACTTCAAGAGCTTGGAGCC	360
Db	301	TACACCTACTTTTGCAATGGGGGAAGATAATTTGATAAACGACTTCAAGAGCTTGGAGCC	360
QY	361	CGGCATTTCTATGACACTGACATGCAGATGACTGTGTAGTGTAGAACTTGTGTTGAG	420
Db	361	CGGCATTTCTATGACACTGACATGCAGATGACTGTGTAGTGTAGAACTTGTGTTGAG	420
QY	421	CCGTGGATTTCTGGACTCTGGCAGCCCTCAGAAAGCATTTTAGTCAAGCAGAGGACAA	480
Db	421	CCGTGGATTTCTGGACTCTGGCAGCCCTCAGAAAGCATTTTAGTCAAGCAGAGGACAA	480
QY	481	GAGGAGATAAGTGGCGACTCCTCCGGTGGCATCATCTGCATCTCTTGAGGACAGACTTGTG	540
Db	481	GAGGAGATAAGTGGCGACTCCTCCGGTGGCATCATCTGCATCTCTTGAGGACAGACTTGTG	540
QY	541	AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600
Db	541	AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600
QY	601	AGAAAGGATTTCTGAGTGTGAGCAAAATGCAAGTGAACAGCAACCAATCAATGTTGTA	660
Db	601	AGAAAGGATTTCTGAGTGTGAGCAAAATGCAAGTGAACAGCAACCAATCAATGTTGTA	660
QY	661	ATTGAAGACTTTGAGTCTCACTTACCCTCGGTTCGGTACCCCACTCTCAGAGCTCTCTG	720
Db	661	ATTGAAGACTTTGAGTCTCACTTACCCTCGGTTCGGTACCCCACTCTCAGAGCTCTCTG	720
QY	721	AATATTCCTGTTTACCCCGAGATATTTACAGTACATCTGCAGGAGTCTCTTGGCCAG	780
Db	721	AATATTCCTGTTTACCCCGAGATATTTACAGTACATCTGCAGGAGTCTCTTGGCCAG	780
QY	781	GAGGAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTCTTCAAGTGCCAAATTTCAAAG	840
Db	781	GAGGAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTCTTCAAGTGCCAAATTTCAAAG	840
QY	841	GCAGTTCAACTTACTAGAAATGATCCATAAAACCACTCTGTGTGTAGAAATTTGGAATTT	900
Db	841	GCAGTTCAACTTACTAGAAATGATCCATAAAACCACTCTGTGTGTAGAAATTTGGAATTT	900
QY	901	TCAAAATACAGACTTTTCTATCAGCTGGAGATGCCCTTACGCGTATCTGCCCTTAACAGT	960
Db	901	TCAAAATACAGACTTTTCTATCAGCTGGAGATGCCCTTACGCGTATCTGCCCTTAACAGT	960
QY	961	GATTTCTGAGGTACAAAGCCCTACTCCAAAGACTGCGAGCTTGAAGATAAAAGAGACACTGC	1020
Db	961	GATTTCTGAGGTACAAAGCCCTACTCCAAAGACTGCGAGCTTGAAGATAAAAGAGACACTGC	1020
QY	1021	GTCTTTTGAATAAAGGAGGACACAAAGAAAGAGGAGCTTACCTTACCCCGAGCATATA	1080
Db	1021	GTCTTTTGAATAAAGGAGGACACAAAGAAAGAGGAGCTTACCTTACCCCGAGCATATA	1080
QY	1081	CCTGCGGAGTCTCTCTCCAGTTTCACTTTTACCTGGTGTCTTGAATCCGAGCAATTCCT	1140

RESULT 2

US-11-119-096-47

; Sequence 47, Application US/11119096

; Publication No. US20050191701A1

; GENERAL INFORMATION:

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QY	1141	AAAAAGGCATTTTGGAGCCCTTGTGGACTATACAGTGCAGTCTGAAAAGCGCAGG	1200
Db	1141	AAAAAGGCATTTTGGAGCCCTTGTGGACTATACAGTGCAGTCTGAAAAGCGCAGG	1200
QY	1201	CTACAGGAGCTGTGCAGTAAACAAAGGGCAGCGGATTATAGCGCTTTGTACGAGATGCC	1260
Db	1201	CTACAGGAGCTGTGCAGTAAACAAAGGGCAGCGGATTATAGCGCTTTGTACGAGATGCC	1260
QY	1261	TGTGCCCTGTGTGTGATCTCCTCTCGCTTCCCTTCTTGGCAGCACCACTCAGTCTC	1320
Db	1261	TGTGCCCTGTGTGTGATCTCCTCTCGCTTCCCTTCTTGGCAGCACCACTCAGTCTC	1320
QY	1321	CTGCTCGAACATCTTCCCTAAACTTCAACCCAGACCATATTCGTGTGCAGCTCAAGTTTA	1380
Db	1321	CTGCTCGAACATCTTCCCTAAACTTCAACCCAGACCATATTCGTGTGCAGCTCAAGTTTA	1380
QY	1381	TTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGAAATTTCTGTCTACTGCCACA	1440
Db	1381	TTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGAAATTTCTGTCTACTGCCACA	1440
QY	1441	ACAGAGGTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGCTTGTGTGTTGCTTCAGTT	1500
Db	1441	ACAGAGGTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGCTTGTGTGTTGCTTCAGTT	1500
QY	1501	CTTTCAGCCAAAACATACATGATGCCATCCCATGAAGACAGCGGGAAGCCCTGGCTCTTAAGATA	1560
Db	1501	CTTTCAGCCAAAACATACATGATGCCATCCCATGAAGACAGCGGGAAGCCCTGGCTCTTAAGATA	1560
QY	1561	TCCATCTCTCTCGAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC	1620
Db	1561	TCCATCTCTCTCGAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC	1620
QY	1621	ATAATCGTGGGTCCAGGAACCGGCATAGCCCTTATTTGGTTCCTACAAATAGAAAC	1680
Db	1621	ATAATCGTGGGTCCAGGAACCGGCATAGCCCTTATTTGGTTCCTACAAATAGAAAC	1680
QY	1681	TCCAAGAACAAACACCCAGATGGAATTTTGGAGCAATGTGGTGTGTTTGGCTGCAGGC	1740
Db	1681	TCCAAGAACAAACACCCAGATGGAATTTTGGAGCAATGTGGTGTGTTTGGCTGCAGGC	1740
QY	1741	ATAAGATAGGATATCTATTTCCAGAAAAGAGCTCAGACATTTCTTAAGCATGGGATCT	1800
Db	1741	ATAAGATAGGATATCTATTTCCAGAAAAGAGCTCAGACATTTCTTAAGCATGGGATCT	1800
QY	1801	TAACTCATCTAAAGGTTTCTCTCTCAAGAGATGCTCTGTGGGAGGAGGAGCCCCAG	1860
Db	1801	TAACTCATCTAAAGGTTTCTCTCTCAAGAGATGCTCTGTGGGAGGAGGAGCCCCAG	1860
QY	1861	CAAAATATGTACAAACAAACATCCAGCTTCATGGCCAGAGGTGGCGAGAAATCTCTCTCC	1920
Db	1861	CAAAATATGTACAAACAAACATCCAGCTTCATGGCCAGAGGTGGCGAGAAATCTCTCTCC	1920
QY	1921	AGGAGAACGGCCATATTTATGTGTGGAGATGCAAGATATGSCCAAGGATGTACATG	1980
Db	1921	AGGAGAACGGCCATATTTATGTGTGGAGATGCAAGATATGSCCAAGGATGTACATG	1980
QY	1981	ATGCCCTTGTGCAATAAATAAGCAAGAGGTTGAGGTTGAAAATCTAGAGCAATGAAAA	2040
Db	1981	ATGCCCTTGTGCAATAAATAAGCAAGAGGTTGAGGTTGAAAATCTAGAGCAATGAAAA	2040
QY	2041	CCCTGGCCACTTTTAAAGAAAGAAAAACGCTTACCTTCAGGATATTTGGTCTATAA	2093
Db	2041	CCCTGGCCACTTTTAAAGAAAGAAAAACGCTTACCTTCAGGATATTTGGTCTATAA	2093

:	APPLICANT:	Gravel, Roy A,
:	APPLICANT:	Rozen, Rima
:	APPLICANT:	Leclerc, Daniel
:	APPLICANT:	Wilson, Aaron
:	APPLICANT:	Rosenblatt, David
:	TITLE OF INVENTION:	HUMAN METHIONINE SYNTHASE REDUCTASE;
:	TITLE OF INVENTION:	CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
:	TITLE OF INVENTION:	DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
:	FILE REFERENCE:	50004/003005
:	CURRENT APPLICATION NUMBER:	US/11/119,096
:	CURRENT FILING DATE:	2005-04-29
:	PRIOR APPLICATION NUMBER:	09/487,841
:	PRIOR FILING DATE:	2000-01-19
:	PRIOR APPLICATION NUMBER:	09/371,347
:	PRIOR FILING DATE:	1999-08-10
:	PRIOR APPLICATION NUMBER:	09/232,028
:	PRIOR FILING DATE:	1999-01-15
:	PRIOR APPLICATION NUMBER:	60/071,622
:	PRIOR FILING DATE:	1998-01-16
:	NUMBER OF SEQ ID NOS:	63
:	SOFTWARE:	FastSeq for Windows Version 4.0
:	SEQ ID NO 47	
:	LENGTH:	2093
:	TYPE:	DNA
:	ORGANISM:	Homo sapiens
:	US-11-119-096-47	
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	Matches 2093; Conservative	0; Mismatches 0; Indels 0; Gaps 0;
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Db	1	ATGAGGAGGTTTCTGTACTATATGCTACACAGCAGGCAGGCAAGGCCATCGCAGAA 60
Qy	61	GAAATGTGTGACGAAGCTGTGGTACATGGATTTTCGAGATCTTCACTGTATTAGTGAA 120
Db	61	GAAATGTGTGACGAAGCTGTGGTACATGGATTTTCGAGATCTTCACTGTATTAGTGAA 120
Qy	121	TCCGATAAGTATGACCTTAATAAACCGAAGACAGCTCTTGTGTGTGGTCTTACCACG 180
Db	121	TCCGATAAGTATGACCTTAATAAACCGAAGACAGCTCTTGTGTGTGGTCTTACCACG 180
Qy	181	GGCACCGGAGACCCACCGACACAGCCGCAAGTTTGTAAAGGAAATACAGAACCAAACA 240
Db	181	GGCACCGGAGACCCACCGACACAGCCGCAAGTTTGTAAAGGAAATACAGAACCAAACA 240
Qy	241	CTGCCGGTGTGATTTCTTTGTCTCACTGCGGTATGGTTTACCTGGGTCTCGGTGATTCAGAA 300
Db	241	CTGCCGGTGTGATTTCTTTGTCTCACTGCGGTATGGTTTACCTGGGTCTCGGTGATTCAGAA 300
Qy	301	TACACCTACTTTTCCAATGGGGGGAAGTAATGATAAACGACTTCAAGAGCTTGGAGCC 360
Db	301	TACACCTACTTTTCCAATGGGGGGAAGTAATGATAAACGACTTCAAGAGCTTGGAGCC 360
Qy	361	CGGCATTTCTATGACACTGGACATGACATGCTGTGTAGGTTTAGAACTTGTGGTTGAG 420
Db	361	CGGCATTTCTATGACACTGGACATGACATGCTGTGTAGGTTTAGAACTTGTGGTTGAG 420
Qy	421	CCGTGGATTTGTGGAATCTGCCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 480
Db	421	CCGTGGATTTGTGGAATCTGCCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 480
Qy	481	GAGGAGATTAAGTGGGGNACTCCCGGTGGCATCACTGCATCTCTTGAGCAGACAGCTTGTG 540
Db	481	GAGGAGATTAAGTGGGGNACTCCCGGTGGCATCACTGCATCTCTTGAGCAGACAGCTTGTG 540
Qy	541	AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
Db	541	AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
Qy	601	AGAAAGGATTTCTGAGGTTTTGAAGCAAAATCAGGTGAA CAGCAACCAATCCAAATGTTGTA 660

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Db 1741 ATAAGGATAGGATTATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGATCT 1800
QY 1801 TAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCTGTGGGAGGAGGAGGAGGCCCCAG 1860
Db 1801 TAACTCATCTAAAGGTTTCTTCTCAAGAGATGCTCTGTGGGAGGAGGAGGAGGCCCCAG 1860
QY 1861 CAAAGTATGTACAAAGCAACATCCAGTTTCATGCCAGCAGGTGGCGAGAAATCTCTCTCC 1920
Db 1861 CAAAGTATGTACAAAGCAACATCCAGTTTCATGCCAGCAGGTGGCGAGAAATCTCTCTCC 1920
QY 1921 AGGAGACGGCCATATTTATGTGTGTGGAGATCAAGAGNATATGCCCAAGATCTACATG 1980
Db 1921 AGGAGACGGCCATATTTATGTGTGTGGAGATCAAGAGNATATGCCCAAGATCTACATG 1980
QY 1981 ATGCCCTTGTGCAATTAATAAGCAAGAGGTTGGAGTTGAAAACTAGAAAGCAATGAAAA 2040
Db 1981 ATGCCCTTGTGCAATTAATAAGCAAGAGGTTGGAGTTGAAAACTAGAAAGCAATGAAAA 2040
QY 2041 CCCTGGCCATTTAAAAAGAGAAAAACGCTACCTTCAGGATATTTGGTCAATA 2093
Db 2041 CCCTGGCCATTTAAAAAGAGAAAAACGCTACCTTCAGGATATTTGGTCAATA 2093

RESULT 3
US-09-371-347-1
; Sequence 1, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-1

Query Match 99.3%; Score 2079; DB 10; Length 2097;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 0; Indels 4; Gaps 1;

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Db 1 ATGAGGAGGTTTCTGTACTATCTACAGAGGAGGACAGGCAAGGCCATCCAGAA 60
QY 61 GAAATGTGTGAGCAAGCTGTGTGATCATGGATTTCTGCAGATCTTCACTGTATTAGTAA 120
Db 61 GAAATGTGTGAGCAAGCTGTGTGATCATGGATTTCTGCAGATCTTCACTGTATTAGTAA 120
QY 121 TCCGATAAGTATGACCTTAAAAACCGAAACAGCTCTCTTGTGTGTGTGTCTTACCAG 180
Db 121 TCCGATAAGTATGACCTTAAAAACCGAAACAGCTCTCTTGTGTGTGTGTCTTACCAG 180
QY 181 GGCACCGGAGACCCACCGACACACCGCGAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 181 GGCACCGGAGACCCACCGACACACCGCGAAGTTTGTAAAGAAATACAGAACCAACA 240
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QY 361 CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGGTTTAGAACTTTGTGGTTGAG 420
Db 361 CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGGTTTAGAACTTTGTGGTTGAG 420
QY 421 CCGTGGATTTCTGGAATCTGTGGCCAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA 480
Db 421 CCGTGGATTTCTGGAATCTGTGGCCAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA 480
QY 481 GAGGAGATAGTGTGCGCACTCCCGTGGCATCACCTGCATCTCTTGGAGACAGACCTTTGTG 540
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QY 541 AAGTCAGAGCTGTCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATTCAGGA 600
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QY 601 AGAAAGGATTCGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 660
Db 601 AGAAAGGATTCGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAATGTTGTA 660
QY 661 ATTGAAGACTTTGAGTCTCTCACTTTACCCGTTCCGTAACCCCACTCTCACAAAGCCTCTCTG 720
Db 661 ATTGAAGACTTTGAGTCTCTCACTTTACCCGTTCCGTAACCCCACTCTCACAAAGCCTCTCTG 720
QY 721 AATATTCCTGTTTACCCCCAGAAATATTACAGGTATACATCTGCAGGAGTCTCTTGGCCAG 780
Db 721 AATATTCCTGTTTACCCCCAGAAATATTACAGGTATACATCTGCAGGAGTCTCTTGGCCAG 780
QY 781 GAGAAAGCCAGATCTGTGACTTTCAGAGATCCAGTCTTCAAGTGCCTCAATTTCAAAG 840
Db 781 GAGAAAGCCAGATCTGTGACTTTCAGAGATCCAGTCTTCAAGTGCCTCAATTTCAAAG 840
QY 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTGAATTTGGACATTT 900
Db 841 GCAGTTCAACTTACTACGAATGATGCCATAAAACCACTCTGCTGGTGAATTTGGACATTT 900
QY 901 TCAAAATACAGACTTTTCTATCAGCTGGAGATGCTTTCAGCGTGTATCTGCCCTAAACAGT 960
Db 901 TCAAAATACAGACTTTTCTATCAGCTGGAGATGCTTTCAGCGTGTATCTGCCCTAAACAGT 960
QY 961 GATTCAGAGTACAAAGCTTCTCAAAGACTGAGCTTGAAGATAAAGAGAGCAGCTGC 1020
Db 961 GATTCAGAGTACAAAGCTTCTCAAAGACTGAGCTTGAAGATAAAGAGAGCAGCTGC 1020
QY 1021 GTCTCTTTGAAATAAAGGCGACACAAAGAAAGAGGAGCTACCTTACCCAGCATATA 1080
Db 1021 GTCTCTTTGAAATAAAGGCGACACAAAGAAAGAGGAGCTACCTTACCCAGCATATA 1080
QY 1081 CCTCGGAGTCTCTCTCAGTTTCAATTTTACCTGGTGTCTTGAATTCGAGCAATTCCT 1140
Db 1081 CCTCGGAGTCTCTCTCAGTTTCAATTTTACCTGGTGTCTTGAATTCGAGCAATTCCT 1140
QY 1141 AAAAAGGCAATTTTGGCGAGCCCTTGTGACTATACCAAGTGAAGTGAAGAAAGCGCAGG 1200
Db 1141 AAAAAGGCAATTTTGGCGAGCCCTTGTGACTATACCAAGTGAAGTGAAGAAAGCGCAGG 1200
QY 1201 CTACAGAGCTGTGCAGTAAACAAGGGGCGACCGCATATAGCCGCTTTGTACGAGATGCC 1260
Db 1201 CTACAGAGCTGTGCAGTAAACAAGGGGCGACCGCATATAGCCGCTTTGTACGAGATGCC 1260
QY 1261 TGTGCTGCTTTGTTGGATCTCTCTCGCTTTTCCCTTCTTCCAGCCACCACTCAGTCTC 1320
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QY 1321 CTGCTCGAACAATCTTCTTAACTTCAACCCAGACCATATTTGCTGTGCAAGCTCAAGTTTA 1380
Db 1321 CTGCTCGAACAATCTTCTTAACTTCAACCCAGACCATATTTGCTGTGCAAGCTCAAGTTTA 1380
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Db 901 TCAATAACAGACTTTTCTATACGCTGGAGATGCCTTTCAGCGTATCTGCCCTAACAGT 960
Qy 961 GATTCTGAGGTACAAAGCTTACTCAAGACTGAGCTTGAAGATAAAGAGAGACACTGC 1020
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Db 1021 GTCTCTTTGAAAATAAAGGAGACACAAAGAGAAAGAGGAGTACTTACCCCAATATA 1080
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Db 1141 AAAAAGGATTTTTCGAGCCCTTGTGAGCTATACCAAGTACAGTGTGAAAGGCGAGG 1200
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Db 1201 CTACAGAGCTGTGCAGTAAACAAGGCGAGCCGATATAGCCGCTTTGTACGAGATGCC 1260
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Db 1261 TGTGCTGCTGTTGTGGATCTCTCTCTGCTTTCCTCTTCCCTTCTTCCAGCCCACTCAGTCTC 1320
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Qy 1501 CTTGAGCAACATACATGATGCCATGAGAGAGCGGGAAGCGCTGGCTTCAAGATA 1560
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Db 1621 ATAAATGTTGGTCCAGGAACCGGATAGCCCCGTTTATTGGGTTTCTTACAAACAT 1676
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Qy 1737 AGGATAGGATAGGATATCTATTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1796
Db 1741 AGGATAGGATAGGATATCTATTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1800
Qy 1797 ATCTTAATCTCATTAAGGTTTCTTCTCAAGAGATGCTCTTGTGGGAGGAGGAAGCC 1856
Db 1801 ATCTTAATCTCATTAAGGTTTCTTCTCAAGAGATGCTCTTGTGGGAGGAGGAAGCC 1860
Qy 1857 CCAGAAAGTATGTAACAACAACATCCAGTTTCATGCCAGAGAGGTGGGAGAAATCTC 1916
Db 1861 CCAGAAAGTATGTAACAACAACATCCAGTTTCATGCCAGAGAGGTGGGAGAAATCTC 1920
Qy 1917 CTCAGGAGAGCGCCATATTTATGTGTGGAGTGAAGAAATATGCCCAAGATGTA 1976
Db 1921 CTCAGGAGAGCGCCATATTTATGTGTGGAGTGAAGAAATATGCCCAAGATGTA 1980
Qy 1977 CATGATGCCCTTGTGCAAAATAAAGCAAAAGAGGTTGGAGTTGAAAAAATAGAAAGCAATG 2036

Db 1981 CATGATGCCCTTGTGCAAAATAAAGCAAAAGAGGTTGGAGTTGAAAAAATAGAAAGCAATG 2040
Qy 2037 AAAACCTTGGCCACTTTTAAAGAGAAAGAAACGCTTACCTTCAGGATATTTGGTCAATA 2093
Db 2041 AAAACCTTGGCCACTTTTAAAGAGAAAGAAACGCTTACCTTCAGGATATTTGGTCAATA 2097
RESULT 5
US-09-371-347-24
; Sequence 24, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371.347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-24
Query Match 99.3%; Score 2079; DB 10; Length 3259;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 0; Indels 4; Gaps 1;
Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTACAGAGGAGCAAGGCAAGGCCATCGCAGAA 60
Db 80 ATGAGGAGGTTTCTGTTACTATATGCTACAGAGGAGCAAGGCAAGGCCATCGCAGAA 139
Qy 61 GAAATGTGTGAGCAAGCTGTGTACATGGATTTTCTGCAGATCTTCACTGATTAGTAA 120
Db 140 GAAATGTGTGAGCAAGCTGTGTACATGGATTTTCTGCAGATCTTCACTGATTAGTAA 199
Qy 121 TCCCATAGATGATGACCTTAAACCCGAAACAGCTCTCTTGTGTTGTGGTTTCTACACAG 180
Db 200 TCCCATAGATGATGACCTTAAACCCGAAACAGCTCTCTTGTGTTGTGGTTTCTACACAG 259
Qy 181 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 260 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTAAAGAAATACAGAACCAACA 319
Qy 241 CTGCGGTTGATTTCTTTGCTCAGCTGCGGTATGGGTACTCGGTCTCGGTGATTCAGAA 300
Db 320 CTGCGGTTGATTTCTTTGCTCAGCTGCGGTATGGGTACTCGGTCTCGGTGATTCAGAA 379
Qy 301 TACACCTACTTTTCAATGGGGGAAGATTAATGATAACGACTTCAAGAGCTCGAGCC 360
Db 380 TACACCTACTTTTCAATGGGGGAAGATTAATGATAACGACTTCAAGAGCTCGAGCC 439
Qy 361 CGGATTTCTATGACACTGGAATGACATGCTGTGTAGGTTTGTAGAACTTTGTGGTTGAG 420
Db 440 CGGATTTCTATGACACTGGAATGACATGCTGTGTAGGTTTGTAGAACTTTGTGGTTGAG 499
Qy 421 CCCTGGATTTGCTGAGCTCTGCGCAGCCCTCAGAAAGCATTTTAGTCAAGCAGAGACAA 480
Db 500 CCCTGGATTTGCTGAGCTCTGCGCAGCCCTCAGAAAGCATTTTAGTCAAGCAGAGACAA 559
Qy 481 GAGGAGATAAGTGGCGCACTCCCGTGGCATCAGCTGATCTTGGAGACAGACCTTGTG 540
Db 560 GAGGAGATAAGTGGCGCACTCCCGTGGCATCAGCTGATCTTGGAGACAGACCTTGTG 619
Qy 541 AAGTCAGAGCTGCTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600

Db 620 AAGTCAGAGCTGCTACACATTCGAAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 679
Qy 601 AGAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGCAAGCAAAATTCGAATTCGA 660
Db 680 AGAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGCAAGCAAAATTCGAATTCGA 739
Qy 661 ATTGAAGATTTGAGTCTCTCACTTACCGTTGCGGTACCCCACTCTCAAGCCCTCTCTG 720
Db 740 ATTGAAGATTTGAGTCTCTCACTTACCGTTGCGGTACCCCACTCTCAAGCCCTCTCTG 799
Qy 721 AATATTCTGTTTACCCCAAGATTTTACAGGTACATCTGCGAGCTCTCTGCGCAG 780
Db 800 AATATTCTGTTTACCCCAAGATTTTACAGGTACATCTGCGAGCTCTCTGCGCAG 859
Qy 781 GAGGAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCTTCAAG 840
Db 860 GAGGAAGCCCAAGTATCTGTGACTTTCAGCAGATCCAGTTTTTCAAGTGCCTTCAAG 919
Qy 841 GCAGTTCAACTTACGAATGATGCCATATAAAACCACTCTGCTGGTGAATTTGACAT 900
Db 920 GCAGTTCAACTTACGAATGATGCCATATAAAACCACTCTGCTGGTGAATTTGACAT 979
Qy 901 TCAATACAGACTTTTCTATCAGCTCGAGATGCCCTTTCAGCGTATCTGCGCTAACAGT 960
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Qy 1021 GTCTTTTGAATAAAGCGGAGACAAAGAGAAAGAGGAGTACCTTACCCAGCATATA 1080
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Qy 1081 CCTCGGAGATTTCTCTCAGTTCAATTTTACCTGCTCTTGAATTCGAGCAATTCCT 1140
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Qy 1201 CTACAGGAGCTGTGAGTAACAAGGGGAGCGGAGTATAGCCGTTTGTACGAGATGCC 1260
Db 1280 CTACAGGAGCTGTGAGTAACAAGGGGAGCGGAGTATAGCCGTTTGTACGAGATGCC 1339
Qy 1261 TGTCTGCTTTGTTGGATCTCTCTCCTGCTTCCCTTCTTCCGAGCCAGCTCAGTCTC 1320
Db 1340 TGTCTGCTTTGTTGGATCTCTCTCCTGCTTCCCTTCTTCCGAGCCAGCTCAGTCTC 1399
Qy 1321 CTGCTCGAATCATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
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Qy 1501 CTTGAGCAAAACATACATGCTATCCATGAAGACAGCGGGAAGCCCTGCTCTTAAGATA 1560
Db 1580 CTTGAGCAAAACATACATGCTATCCATGAAGACAGCGGGAAGCCCTGCTCTTAAGATA 1639
Qy 1561 TCCATCTCTCTCGAACAACAAATTTCTTCACTTACAGATGACCCCTCAATCCCCATC 1620
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Qy 1677 AAATCCCAAGAACCAACACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1736
Db 1760 AAATCCCAAGAACCAACACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1819
Qy 1737 AGGCAATAGGATAGGATTTCTATTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGG 1796
Db 1820 AGGCAATAGGATAGGATTTCTATTCAGAAAAGAGCTCAGACATTTCTTAAAGCATGG 1879
Qy 1797 ATCTTAACTCATCTAAAGGTTTCTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1856
Db 1880 ATCTTAACTCATCTAAAGGTTTCTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1939
Qy 1857 CCAGCAATAGTATGTACAGAACCAATCCAGCTTTCATGGCCAGCAGTGCAGAAATCTCTC 1916
Db 1940 CCAGCAATAGTATGTACAGAACCAATCCAGCTTTCATGGCCAGCAGTGCAGAAATCTCTC 1999
Qy 1917 CTCAGAGAAAGCGGCATATTTATTTGTGTGGAGATGCAAAAGATATGGCCAAAGATGTA 1976
Db 2000 CTCAGAGAAAGCGGCATATTTATTTGTGTGGAGATGCAAAAGATATGGCCAAAGATGTA 2059
Qy 1977 CATGATGCCCTTGTGCAATAATAAGCAAGAGTTGGAGTTGAAAACCTAGAAGCAATG 2036
Db 2060 CATGATGCCCTTGTGCAATAATAAGCAAGAGTTGGAGTTGAAAACCTAGAAGCAATG 2119
Qy 2037 AAAACCCCTGGCCACTTTAAAAAGAAAGAAACGCTACCTTCAGGATATTTGGTCATAA 2093
Db 2120 AAAACCCCTGGCCACTTTAAAAAGAAAGAAACGCTACCTTCAGGATATTTGGTCATAA 2176

RESULT 6

US-10-450-763-874
; Sequence 874, Application US/10450763
; Publication No. US20050196754A1
; GENERAL INFORMATION:
; APPLICANT: Hyseq, Inc
; TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
; FILE REFERENCE: 790CIP3/US
; CURRENT APPLICATION NUMBER: US/10/450,763
; CURRENT FILING DATE: 2003-06-11
; PRIOR APPLICATION NUMBER: PCT/US01/08631
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/540,217
; PRIOR FILING DATE: 2000-03-31
; PRIOR APPLICATION NUMBER: 09/649,167
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 60736
; SOFTWARE: Custom
; SEQ ID NO 874
; LENGTH: 3259
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SIMILAR
; LOCATION: (80)..(2173)
; OTHER INFORMATION: 100% homologous to Homo sapiens methionine synthase
; OTHER INFORMATION: reductase, accession number AF025794, Smith-Waterman Score=3624.
US-10-450-763-874

Query Match 99.3%; Score 2079; DB 24; Length 3259;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2093; Conservative 0; Mismatches 0; Indels 4; Gaps 1;
Qy 1 ATGAGGAGGTTTCTGTTACTATATGCTTACAGCAGGAGCAGGCAAGGCGCATCGCAAA 60
Db 80 ATGAGGAGGTTTCTGTTACTATATGCTTACAGCAGGAGCAGGCAAGGCGCATCGCAAA 139
Qy 61 GAAATGTGTGAGCAAGCTGTGATGATTTCTGAGATCTTCACTGTATTAGTGAA 120
Db 140 GAAATGTGTGAGCAAGCTGTGATGATTTCTGAGATCTTCACTGTATTAGTGAA 199
Qy 121 TCCGATAGTATGACCTTAAACCCGAAACAGCTCCTCTTGTGTGTTTCTACCAAG 180

Db 200 TCCGATAGTATGACCTAAACACGAAACAGCTCCTCTTGTGTGTGGTTTCTACCAAG 259
Qy 181 GGCACCGGAGACCCACCGACACAGCCGCAAGTTTGTAAAGGAAATACAGAACCAACA 240
Db 260 GGCACCGGAGACCCACCGACACAGCCGCAAGTTTGTAAAGGAAATACAGAACCAACA 319
Qy 241 CTGCGGGTTGATTTCTTTGCTCACCTGCGGTATGGGTTACTTGGGTCCTCGGTGATTCAGAA 300
Db 320 CTGCGGGTTGATTTCTTTGCTCACCTGCGGTATGGGTTACTTGGGTCCTCGGTGATTCAGAA 379
Qy 301 TACACCTACTTTTGCATTTGCGGGGGAAGATTAATGATAAAGACATTAAGAGCTTGGAGCC 360
Db 380 TACACCTACTTTTGCATTTGCGGGGGAAGATTAATGATAAAGACATTAAGAGCTTGGAGCC 439
Qy 361 CGGCATTTCTATGACATGACATGACATGCTGTGTAGGTTTAGAACTTGTGGTTGAG 420
Db 440 CGGCATTTCTATGACATGACATGACATGCTGTGTAGGTTTAGAACTTGTGGTTGAG 499
Qy 421 CCGTGGATTGCTGACCTCTGCGCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 480
Db 500 CCGTGGATTGCTGACCTCTGCGCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGACAA 559
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Db 560 GAGAGATAAGTGGCGCATCTCCGGTGCATCACTGCACTCTTGGAGACAGACTTGTG 619
Qy 541 AAGTCAGAGCTGTACACATTTGATCTCAAGTCAGCTTCTGAGATTCGATGATTCAGGA 600
Db 620 AAGTCAGAGCTGTACACATTTGATCTCAAGTCAGCTTCTGAGATTCGATGATTCAGGA 679
Qy 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAGTGAACAGCAACCAATCCAAATGTTGTA 660
Db 680 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAGTGAACAGCAACCAATCCAAATGTTGTA 739
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Db 740 ATTGAAGCTTTGAGTCTCTACTTACCGTTGCGTACCCCACTCTCAAGCCTCTCTG 799
Qy 721 AATATTCTGGTTTACCCCGAGATTTTACAGGTACATCTGCAGGATCTCTTGGCCAG 780
Db 800 AATATTCTGGTTTACCCCGAGATTTTACAGGTACATCTGCAGGATCTCTTGGCCAG 859
Qy 781 GAGGAAGCCCAAGTATCTGTGACTTCAGCAGATCCAGTTTTCAGAGTCCCAATTTCAAAG 840
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Qy 1021 GTCTTTTGAATAAAGGCGAGACACAAAGAGAAAGAGCTACTCTTACCCAGCATATA 1080
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Db 1160 CCTGGGATGTTCTCTCCAGTTCAATTTTACCTGGTCTTGAATCCGAGCAATTCCT 1219
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Db 1220 AAAAAGGCATTTTTCGAGCCCTTGTGACTATACAGTGACGTGCTGAAAAGCGCAGG 1279
Qy 1201 CTACAGGAGCTGTGAGTAAACAAGGGGAGCCGATTAATAGCCGTTTGTACGAGATGCC 1260
Db 1280 CTACAGGAGCTGTGAGTAAACAAGGGGAGCCGATTAATAGCCGTTTGTACGAGATGCC 1339

Qy 1261 TGTGCTGCTTGTGTGGATCTCCTCGCTTTCCTTCTTGGCCAGCACCACTCAGTCTC 1320
Db 1340 TGTGCTGCTTGTGTGGATCTCCTCGCTTTCCTTCTTGGCCAGCACCACTCAGTCTC 1399
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Qy 1381 TTTTACCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
Db 1460 TTTTACCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1519
Qy 1441 ACAGAGTTCTTGGGAAAGGAGTATGTACAGGCTGGCTTGGCTTGTGTGTTGCTTCAGTT 1500
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Qy 1501 CTTTCCAGCAACATATCATGCCATCCATGAAGACAGCGGAAAGCCCTGGCTCTTAAGATA 1560
Db 1580 CTTTCCAGCAACATATCATGCCATCCATGAAGACAGCGGAAAGCCCTGGCTCTTAAGATA 1639
Qy 1561 TCCATCTCTCCTCGAAACAACAAATTTCTTCCACTTACAGATGACCCCTCAATCCCATC 1620
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Qy 1677 AAATCCAAAGAACCAACCCAGATGGAATTTTTCGAGCAATGTGTTGTTTGGCTGC 1736
Db 1760 AAATCCAAAGAACCAACCCAGATGGAATTTTTCGAGCAATGTGTTGTTTGGCTGC 1819
Qy 1737 AGGATTAAGATAGGATTTATCTATTGAGAAAGAGCTCAGACATTTTCTTAAGCATGG 1796
Db 1820 AGGATTAAGATAGGATTTATCTATTGAGAAAGAGCTCAGACATTTTCTTAAAGCATGG 1879
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Db 1880 ATCTTAACTCATTAAGGTTTCTCTCTCAAGAGATGCTCTGTTGGGAGGAGGAAGCC 1939
Qy 1857 CCAGCAAAAGTATGTACAGCAACATCCAGCTTCATGGCCAGAGGTGGCCAGATCTC 1916
Db 1940 CCAGCAAAAGTATGTACAGCAACATCCAGCTTCATGGCCAGAGGTGGCCAGATCTC 1999
Qy 1917 CTCAGAGAAAGCCCATATTATTGTGTGGAGATGCAAGAAATATGGCCCAAGGATGTA 1976
Db 2000 CTCAGAGAAAGCCCATATTATTGTGTGGAGATGCAAGAAATATGGCCCAAGGATGTA 2059
Qy 1977 CATGATGCCCTTGTGCAAAATAAAGCAAGAGGTTGGAGTTGAAAAAACTAGAGCAATG 2036
Db 2060 CATGATGCCCTTGTGCAAAATAAAGCAAGGTTGGAGTTGAAAAAACTAGAGCAATG 2119
Qy 2037 AAAACCCCTGGCCACTTTAAAAAGAAAAACGCTACCTTCAGGATATTGGTCTATA 2093
Db 2120 AAAACCCCTGGCCACTTTAAAAAGAAAAACGCTACCTTCAGGATATTGGTCTATA 2176

RESULT 7

US-11-119-096-24
; Sequence 24, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leciere, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE.
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096

Db 1940 CCAGCAAGTATGTACAAAGCAACATCCAGCTTCATGGCCAGCAGGTGGCGAGAATCCTC 1999
Qy 1917 CTCAGAGAAACGGGCATATTTATGTGTGTGGAGATGCAAGAAATATATGGCCAAAGATGTA 1976
Db 2000 CTCAGGAGAAACGGGCATATTTATGTGTGTGGAGATGCAAGAAATATATGGCCAAAGATGTA 2059
Qy 1977 CATGATGCCCTTGTGCAAAATAATAGCAAAAGAGGTGGAGTTGAAAACTAGAACCAATG 2036
Db 2060 CATGATGCCCTTGTGCAAAATAATAGCAAAAGAGGTGGAGTTGAAAACTAGAACCAATG 2119
Qy 2037 AAAACCCCTGGCCACTTTAAAAAGAAAGAAACCGCTACCTTCAGGATATTTGGTCATAA 2093
Db 2120 AAAACCCCTGGCCACTTTAAAAAGAAAGAAACCGCTACCTTCAGGATATTTGGTCATAA 2176

RESULT 8
US-09-371-347-41
; Sequence 41, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE;
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-41

Query Match 99.3%; Score 2077.4; DB 10; Length 2097;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2092; Conservative 0; Mismatches 1; Indels 4; Gaps 1;

Qy 1 ATGAGGAGTTCTGTACTATATGCTACAGAGGACAGGCAAGGCCATCGCAGAA 60
Db 1 ATGAGGAGTTCTGTACTATATGCTACAGAGGACAGGCAAGGCCATCGCAGAA 60
Qy 61 GAAATGTGTGAGCAAGCTGTGTATCATGATTTCTGCAGATCTTCACTGTATTAGTGAA 120
Db 61 GAAATGTGTGAGCAAGCTGTGTATCATGATTTCTGCAGATCTTCACTGTATTAGTGAA 120
Qy 121 TCCGATAAGTATGACCTAAAAACCGAAACAGCTCCTTGTGTGTGTGTCTTACCACG 180
Db 121 TCCGATAAGTATGACCTAAAAACCGAAACAGCTCCTTGTGTGTGTGTCTTACCACG 180
Qy 181 GGCACCGAGACCCACCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Db 181 GGCACCGAGACCCACCGACACAGCCGCAAGTTTGTAAAGAAATACAGAACCAACA 240
Qy 241 CTGCGGTTGATTTCTTTGCTCACCTGCGGTATGGTTACTGGGTCTCGGTGATTCAGAA 300
Db 241 CTGCGGTTGATTTCTTTGCTCACCTGCGGTATGGTTACTGGGTCTCGGTGATTCAGAA 300
Qy 301 TACACCTACTTTTGCATGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC 360
Db 301 TACACCTACTTTTGCATGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTGGAGCC 360
Qy 361 CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGTTTGAACCTTGTGTTGAG 420
Db 361 CGGCATTTCTATGACACTGGACATGCAGATGACTGTGTAGTTTGAACCTTGTGTTGAG 420
Qy 421 CCGTGGATTGTGGACTCTGGCCAGCCCTCAGAAAGCATTTTGTAGTCAAGCAGAGACAA 480

Db 421 CCGTGGATTGTGCTGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGCTCAAGCAGAGGACAA 480
Qy 481 GAGGAGATAGTGGCGCACTCCCGGTGGCATCACTGATCTCTTGAGGACAGACCTTGTG 540
Db 481 GAGGAGATAGTGGCGCACTCCCGGTGGCATCACTGATCTCTTGAGGACAGACCTTGTG 540
Qy 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGAGCTTCTGAGATTCGATGATTGTA 600
Db 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCAGAGCTTCTGAGATTCGATGATTGTA 600
Qy 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGCAACCAATCCAAATGTTGTA 660
Db 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATGCAAGCAACCAATCCAAATGTTGTA 660
Qy 661 ATTGAAGACTTTGAGTCTCTACCTTACCCTTGGTACCCCACTCTCAAGCCCTCTCTG 720
Db 661 ATTGAAGACTTTGAGTCTCTACCTTACCCTTGGTACCCCACTCTCAAGCCCTCTCTG 720
Qy 721 AATATTCTGTTTACCCCAAGATATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 780
Db 721 AATATTCTGTTTACCCCAAGATATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 780
Qy 781 GAGGAAAGCCCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTSCCAATTTCAAAG 840
Db 781 GAGGAAAGCCCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTSCCAATTTCAAAG 840
Qy 841 GCAGTTCAACTTACTAGCAATGATGATGATGATGATGATGATGATGATGATGATGATGAT 900
Db 841 GCAGTTCAACTTACTAGCAATGATGATGATGATGATGATGATGATGATGATGATGATGAT 900
Qy 901 TCAAAATACAGACTTTTCTATCAGCTGGAGATGCTTTCAGCCTGATCTGCCCTAACAGT 960
Db 901 TCAAAATACAGACTTTTCTATCAGCTGGAGATGCTTTCAGCCTGATCTGCCCTAACAGT 960
Qy 961 GATTCTGAGGTACAAAGCCTACTCCAAAGCTGAGCTTGAAGATAAAAGAGAGCACTGC 1020
Db 961 GATTCTGAGGTACAAAGCCTACTCCAAAGCTGAGCTTGAAGATAAAAGAGAGCACTGC 1020
Qy 1021 GTCTTTTGAATAAAGGAGACACAAAGAAAGAGGAGTACCTTACCCAGCATATA 1080
Db 1021 GTCTTTTGAATAAAGGAGACACAAAGAAAGAGGAGTACCTTACCCAGCATATA 1080
Qy 1081 CCTCGGATGTTCTCTCAGTTCAATTTTACCTGTTGTTGAAATCCGAGCAATTCCT 1140
Db 1081 CCTCGGATGTTCTCTCAGTTCAATTTTACCTGTTGTTGAAATCCGAGCAATTCCT 1140
Qy 1141 AAAAAGGCATTTTTCGAGCCCTTGTGGACTATATACAGTGCAGTGTGAAAAGCGCAGG 1200
Db 1141 AAAAAGGCATTTTTCGAGCCCTTGTGGACTATATACAGTGCAGTGTGAAAAGCGCAGG 1200
Qy 1201 CTACAGGAGCTGTGAGTAAACAAGGGGACCGGATATAGCCGTTTGTACGAGATGCC 1260
Db 1201 CTACAGGAGCTGTGAGTAAACAAGGGGACCGGATATAGCCGTTTGTACGAGATGCC 1260
Qy 1261 TGTGCTGTTGTTGGATCTCTCTGCTTTTCCCTTCTGCGACGACCACTCAGTCTC 1320
Db 1261 TGTGCTGTTGTTGGATCTCTCTGCTTTTCCCTTCTGCGACGACCACTCAGTCTC 1320
Qy 1321 CTGCTCGAACATCTTCTTAAACTTCAACCCAGACCATATTCGTTGCAAGCTCAAGTTTA 1380
Db 1321 CTGCTCGAACATCTTCTTAAACTTCAACCCAGACCATATTCGTTGCAAGCTCAAGTTTA 1380
Qy 1381 TTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGGAAATTTCTGTCTACTGCCACA 1440
Db 1381 TTTCAACCCAGGAAAGCTCCATTTTGTCTTCAACATTTGGAAATTTCTGTCTACTGCCACA 1440
Qy 1441 ACAGAGTTCTGCGAAGGAGATGATACAGCTGGCTGGCTTCTGTTGTTGTTGTTGTTGTTG 1500
Db 1441 ACAGAGTTCTGCGAAGGAGATGATACAGCTGGCTGGCTTCTGTTGTTGTTGTTGTTGTTG 1500
Qy 1501 CTTTCAGGCAAAACATACATGCATGCCATGAAGACAGCGGGAAGCCCTCGCTCCTAAGATA 1560
Db 1501 CTTTCAGGCAAAACATACATGCATGCCATGAAGACAGCGGGAAGCCCTCGCTCCTAAGATA 1560

1501	Db	CTTCAGCCAAACATACATGCATCCATGAAAGACAGCGGGAAAGCCCTGGCTCTCTTAAGATA	1561
1561	Qy	TCCATCTCTCTCGAAACAAATTCCTTTCCACTTACAGATGACCCCTCAATCCCCCATC	1620
1561	Db		
1561	Db	TCCATCTCTCTCGAAACAAATTCCTTTCCACTTACAGATGACCCCTCAATCCCCCATC	1620
1621	Qy	ATAATGTGGGTCCAGGAAACGGGATAGCCCCGTTTATTGGTTCCTTACAACATF----	1676
1621	Db		
1621	Db	ATAATGTGGGTCCAGGAAACGGGATAGCCCCGTTTATTGGTTCCTTACAACATAGAGAG	1680
1677	Qy	AACTCCAGAAACAAACCCAGATGGAAATTTTGGAGCAATGTGGTGTGTTTTTGGCTGC	1736
1681	Db	AACTCCAGAAACAAACCCAGATGGAAATTTTGGAGCAATGTGGTGTGTTTTTGGCTGC	1740
1737	Qy	AGGCATAAGGATAGGGATTATCTATTACAGAAAAGAGCTCAGACATTTCCCTTAAGCATGGG	1796
1741	Db	AGGCATAAGGATAGGGATTATCTATTACAGAAAAGAGCTCAGACATTTCCCTTAAGCATGGG	1800
1797	Qy	ATCTTAACTCATCTAAAGTTTTCTTCAAGAGATGCTCTGTGGGAGGAGGAAGCC	1856
1801	Db	ATCTTAACTCATCTAAAGTTTTCTTCTCAAGAGATGCTCTGTGGGAGGAGGAAGCC	1860
1857	Qy	CCAGCAAGTATGTACAAAGCAACATCCAGTTCATGCCACAGCAGGTGGCGAGATCCTC	1916
1861	Db	CCAGCAAGTATGTACAAAGCAACATCCAGTTCATGCCACAGCAGGTGGCGAGATCCTC	1920
1917	Qy	CTCCAGGAGAAAGCCCATATTTATGTGTGTGGAGATGCAAGAAATATGGCCCAAGGATGTA	1976
1921	Db	CTCCAGGAGAAAGCCCATATTTATGTGTGTGGAGATGCAAGAAATATGGCCCAAGGATGTA	1980
1977	Qy	CATGATGCCCTTGTGCCAAATAATAAGCAAGAGGTTGGAGTTGCAAAAACCTAGAAAGCAATG	2036
1981	Db	CATGATGCCCTTGTGCCAAATAATAAGCAAGAGGTTGGAGTTGCAAAAACCTAGAAAGCAATG	2040
2037	Qy	AAAAACCTGGCCACTTTAAAGAGAAAAACGCTTACCTTCAGGATATTTGGTCATAA	2093
2041	Db	AAAAACCTGGCCACTTTAAAGAGAAAAACGCTTACCTTCAGGATATTTGGTCATAA	2097

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RESULT 9
US-09-371-347-43
; Sequence 43, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 43
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-43

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	Query Match	99.3%	Score 2077.4	DB 10	Length 2097
	Best Local Similarity	99.8%	Pred. No. 0		
	Matches 2092	Conservative	0	Mismatches	1; Indels 4; Gaps 1;
Qy	1	ATGAGGAGGTTTCGTGTACTATATGCTACACAGCAGGACAGGCAARAGGCCATCGCGAA	60		
Db	1	ATGAGGAGGTTTCGTGTACTATATGCTACACAGCAGGACAGGCAARAGGCCATCGCGAA	60		
Qy	61	GAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTGTTATTGTGAA	120		

Db	61	GAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTATATATTGTGAA	120
Qy	121	TCCGATAAGATATGACCTTAAAAACCGAAACAGCTCCTCTTGTCTTGTGGTTCCTACCAAG	180
Db	121	TCCGATPAAGTATGACCTTAAAAACCGAAACAGCTCCTCTTGTGTGTGTCTTCTACCAAG	180
Qy	181	GGCACCGGAGACCCACCCGACACAGCCGCGCAAGTTTGTAAAGAAATACAGAAACCAACA	240
Db	181	GGCACCGGAGACCCACCCGACACAGCCGCGCAAGTTTGTAAAGAAATACAGAAACCAACA	240
Qy	241	CTCCGGTTCATTTCTTTTGTCTCACTCCGCTGCGGTACTCGGTCTCGGTGATTCAGAA	300
Db	241	CTCCGGTTCATTTCTTTTGTCTCACTCCGCTGCGGTACTCGGTCTCGGTGATTCAGAA	300
Qy	301	TACACCTACTTTTGCATATGGGGGAAGATAAATTGATAAACGACTTCAAGAGCTTGGAGCC	360
Db	301	TACACCTACTTTTGCATATGGGGGAAGATAAATTGATAAACGACTTCAAGAGCTTGGAGCC	360
Qy	361	CGGCATTTCTATGACACTGACATGACAGATGACTGTGTAGGTTTAAACCTTGTGGTTGAG	420
Db	361	CGGCATTTCTATGACACTGACATGACAGATGACTGTGTAGGTTTAAACCTTGTGGTTGAG	420
Qy	421	CCGTGGATTTCTCGACTCTGCGCCAGCCCTCAGAAAGCATTTTAGTTCAGAGCAGACAA	480
Db	421	CCGTGGATTTCTCGACTCTGCGCCAGCCCTCAGAAAGCATTTTAGTTCAGAGCAGACAA	480
Qy	481	GAGGAGATAAGTGGCGCAGCTCCCGGTGGCATCACCTGCGATCCTTGAAGGACAGACCTTGTG	540
Db	481	GAGGAGATAAGTGGCGCAGCTCCCGGTGGCATCACCTGCGATCCTTGAAGGACAGACCTTGTG	540
Qy	541	AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600
Db	541	AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600
Qy	601	AGAAAGGATTCAGAGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCCATGTTGTA	660
Db	601	AGAAAGGATTCAGAGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCCATGTTGTA	660
Qy	661	ATTGAAGACTTTGAGTCTCCTCACCTTACCCTTCCGTTACCGTACCCCACTCTCAAGGCTCTCTG	720
Db	661	ATTGAAGACTTTGAGTCTCCTCACCTTACCCTTCCGTTACCGTACCCCACTCTCAAGGCTCTCTG	720
Qy	721	AATATTCTCGTTTACCCCGAATAATTTACAGGTAATCTGCGAGAGTCTCTTGGCCAG	780
Db	721	AATATTCTCGTTTACCCCGAATAATTTACAGGTAATCTGCGAGAGTCTCTTGGCCAG	780
Qy	781	GAGGAAGCCAAGTATCTGTGACTTCAGCAGATCCAGTTTTCAGTGCCCAATTTCAAAG	840
Db	781	GAGGAAGCCAAGTATCTGTGACTTCAGCAGATCCAGTTTTCAGTGCCCAATTTCAAAG	840
Qy	841	GCAGTTTCAACTTACTACGAATGATGCGATAAAACCACTCTGCTGTAGAAATTTGGACATT	900
Db	841	GCAGTTTCAACTTACTACGAATGATGCGATAAAACCACTCTGCTGTAGAAATTTGGACATT	900
Qy	901	TCAAAATACAGATTTTCTTATAGCTTGGAGATGCTTTCAGCGTGATCTGCCCTAACAGT	960
Db	901	TCAAAATACAGATTTTCTTATAGCTTGGAGATGCTTTCAGCGTGATCTGCCCTAACAGT	960
Qy	961	GATTTCTGAGGTACAAAGCCCTACTCBAAGNCTGCAGCTTGAAGATAAAGAGAGCACTGC	1020
Db	961	GATTTCTGAGGTACAAAGCCCTACTCBAAGNCTGCAGCTTGAAGATAAAGAGAGCACTGC	1020
Qy	1021	GTCTCTTTGAAATAAAGGCAGACACAAAGAGAAAGGAGCTACCTTACCCAGCATATA	1080
Db	1021	GTCTCTTTGAAATAAAGGCAGACACAAAGAGAAAGGAGCTACCTTACCCAGCATATA	1080
Qy	1081	CCTGCGGGATGTTCTCTCCAGTTTCATTTTTTACCTGGTGTCTTGAATTCGAGCAATTCCT	1140
Db	1081	CCTGCGGGATGTTCTCTCCAGTTTCATTTTTTACCTGGTGTCTTGAATTCGAGCAATTCCT	1140
Qy	1141	AAAAAGGCATTTTTGGAGCCCTTGTGGACTATACAGTGAAGTCTGAAAAGCCGAG	1200
Db	1141	AAAAAGGCATTTTTGGAGCCCTTGTGGACTATACAGTGAAGTCTGAAAAGCCGAG	1200

Qy	1201	CTACAGAGCTGTGCACTAAACAAGGGGCAGCCGATTATAGCGCTTTGTACGAGATGCC	1260
Db	1201	CTACAGAGCTGTGCACTAAACAAGGGGCAGCCGATTATAGCGCTTTGTACGAGATGCC	1260
Qy	1261	TGTGCGCTGTTGTGGATCTCCCTCGCTTTCCCTCTTTGCGCAGCCACCACTCAGTCTC	1320
Db	1261	TGTGCGCTGTTGTGGATCTCCCTCGCTTTCCCTCTTTGCGCAGCCACCACTCAGTCTC	1320
Qy	1321	CTGCTCGAACATCTTCTCTAAACTTTCAACCCAGACCATATTTCTGTGTGCAAGCTCAAGTTTA	1380
Db	1321	CTGCTCGAACATCTTCTCTAAACTTTCAACCCAGACCATATTTCTGTGTGCAAGCTCAAGTTTA	1380
Qy	1381	TTTCACCCAGGAAGCTCCATTTTGTCTTCAACATTGTGTGAAATTTCTGTCTACTGCCACA	1440
Db	1381	TTTCACCCAGGAAGCTCCATTTTGTCTTCAACATTGTGTGAAATTTCTGTCTACTGCCACA	1440
Qy	1441	ACAGAGTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGCCCTGTTGGTTGCTTCAGTT	1500
Db	1441	ACAGAGTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGCCCTGTTGGTTGCTTCAGTT	1500
Qy	1501	CTTCAGCCAAACATACATGTCATCCCATGAAGACAGCGGGGAAGCCCTGGCTCCTAAGATA	1560
Db	1501	CTTCAGCCAAACATACATGTCATCCCATGAAGACAGCGGGGAAGCCCTGGCTCCTAAGATA	1560
Qy	1561	TCCATCTCTCTCGAAACAACAAATCTTTTCCACTTACAGATGACCCCTCAATCCCCATC	1620
Db	1561	TCCATCTCTCTCGAAACAACAAATCTTTTCCACTTACAGATGACCCCTCAATCCCCATC	1620
Qy	1621	ATAATGTTGGTCCAGAACCCGGCATAGCCCGTTTATTCGGTTCTCTACAAACAT---	1676
Db	1621	ATAATGTTGGTCCAGAACCCGGCATAGCCCGTTTATTCGGTTCTCTACAAACAT---	1676
Qy	1677	AAACTCCAAGAACAAACCCAGATGGAAATTTTGGAGCAATGTGGTTGTTTTTGGCTGC	1736
Db	1677	AAACTCCAAGAACAAACCCAGATGGAAATTTTGGAGCAATGTGGTTGTTTTTGGCTGC	1736
Qy	1737	AGGCATAAGATAGGGATATCTATTACAGAAAGAGCTCAGACATTTCCCTTAAGCATGGG	1796
Db	1737	AGGCATAAGATAGGGATATCTATTACAGAAAGAGCTCAGACATTTCCCTTAAGCATGGG	1796
Qy	1797	ATCTTTAACTCATCTAAAGTTTCCCTCTCAAGAGATGCTCCTGTGTGGGAGGAGGAAGCC	1856
Db	1797	ATCTTTAACTCATCTAAAGTTTCCCTCTCAAGAGATGCTCCTGTGTGGGAGGAGGAAGCC	1856
Qy	1857	CCAGCAAAGTATGTACAAGACAACATCCAGCTTCATGGCCAGCAGGTGGCGAATCCTC	1916
Db	1857	CCAGCAAAGTATGTACAAGACAACATCCAGCTTCATGGCCAGCAGGTGGCGAATCCTC	1916
Qy	1917	CTCCAGGAGACGGCCATATTTATGTGTGTGGAGATGCAAGATATGGCCCAAGGATGTA	1976
Db	1917	CTCCAGGAGACGGCCATATTTATGTGTGTGGAGATGCAAGATATGGCCCAAGGATGTA	1976
Qy	1977	CATGATGCCCTTGTGCAAAATAAAGCAAAAGAGGTTGGAGTTGAAAACTAGAAGCAATG	2036
Db	1977	CATGATGCCCTTGTGCAAAATAAAGCAAAAGAGGTTGGAGTTGAAAACTAGAAGCAATG	2036
Qy	2037	AAAAACCTGGCCATTTTAAAGAAAGAAAAACGCTTACCTTCAGGATATTTGGTCATAA	2093
Db	2037	AAAAACCTGGCCATTTTAAAGAAAGAAAAACGCTTACCTTCAGGATATTTGGTCATAA	2093

RESULT 10

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US-11-119-096-41
; Sequence 41, Application US/11119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Lecterc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONIN

```

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; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: Fast-SEQ for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-11-119-096-41

```

Query Match 99.3%; Score 2077.4; DB 26; Length 2097;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2092; Conservative 0; Mismatches 1; Indels 4; Gaps 1;

Qy	1	ATGAGGAGGTTTCTGTTATCTATATGCTACACAGCAGGGA	CAGGCAAAAGGCCATCGCAGAA	60
Db	1	ATGAGGAGGTTTCTGTTACTATATGCTACACAGCAGGGA	CAGGCAAAAGGCCATCGCAGAA	60
Qy	61	GAATGTGTGACGAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTGTATTAGTGAA	120	
Db	61	GAATATGTGAGCAAGCTGTGGTACATGGAATTTCTGCAGATCTTCACTGTATTAGTGAA	120	
Qy	121	TCCGATTAAGTATGACCTTAAACACGAAACAGCTCCTCTTGTGTGTGTGGTTTCTACCAACG	180	
Db	121	TCCGATTAAGTATGACCTTAAACACGAAACAGCTCCTCTTGTGTGTGTGGTTTCTACCAACG	180	
Qy	181	GGCACCGGAGACCCACCCGACACAGCCGCAAGTTTGTTAGGAAATAACAGAACCAACA	240	
Db	181	GGCACCGGAGACCCACCCGACACAGCCGCAAGTTTGTTAGGAAATATACAGAACCAACA	240	
Qy	241	CTCGCGGTGTGATTTCTTTTGTCTCACTCGGTPATGGTTACTGGGTCTCGGTGATTCAGAA	300	
Db	241	CTCGCGGTGTGATTTCTTTTGTCTCACTCGGTPATGGTTACTGGGTCTCGGTGATTCAGAA	300	
Qy	301	TACACCTACTTTTTCGAATGGGGGAAGATAATTCATAAACACATTCAGAGCTTGGAGCC	360	
Db	301	TACACCTACTTTTTCGAATGGGGGAAGATAATTCATAAACACATTCAGAGCTTGGAGCC	360	
Qy	361	CGGCATTTCTATGACACTTGGACATGCACTGTGTAGGTTTAGAACTTTGTGGTTGAG	420	
Db	361	CGGCATTTCTATGACACTTGGACATGCACTGTGTAGGTTTAGAACTTTGTGGTTGAG	420	
Qy	421	CCGTGGATTTGTGACCTCTGCCAGCCCTCAGAAAGCATTTTAGTTCAGCAGAGGACAA	480	
Db	421	CCGTGGATTTGTGACCTCTGCCAGCCCTCAGAAAGCATTTTAGTTCAGCAGAGGACAA	480	
Qy	481	GAGCAGATTAAGTGGCGACTCCCGGTGGCATCACTGCATCCTTTGAGGACAGACCTCTG	540	
Db	481	GAGCAGATTAAGTGGCGCACTCCCGGTGGCATCACTGCATCCTTTGAGGACAGACCTTGTG	540	
Qy	541	AAGTTCAGAGCTGTCPACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600	
Db	541	AAGTTCAGAGCTGTCPACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA	600	
Qy	601	AGAAAGGATTCGTGAGGTTTTGAAGCAAAATCGACGTGAACCAACCAATCCAACTTCTGA	660	
Db	601	AGAAAGGATTCGTGAGGTTTTGAAGCAAAATCGACGTGAACCAACCAATCCAACTTCTGA	660	
Qy	661	ATTGAAGACTTTGAGTCTCTACTTTACCCGTTTCGGTACCCCCACTCTCTCAAAAGCCTCTCTG	720	
Db	661	ATTGAAGACTTTGAGTCTCTACTTTACCCGTTTCGGTACCCCCACTCTCTCAAAAGCCTCTCTG	720	

QY 721 AATATTCCTGGTTACCCCGAGATATTTA CAGGTACATCTGCGAGGAGTCTCTTTGGCCAG 780
Db 721 AATATTCCTGGTTACCCCGAGATATTTA CAGGTACATCTGCGAGGAGTCTCTTTGGCCAG 780
QY 781 GAGGAAAGCCAAAGTATCTGCTGACTT CAGCAGATCCAGTTTTTCAAGTGCCCAATTTCAAG 840
Db 781 GAGGAAAGCCAAAGTATCTGCTGACTT CAGCAGATCCAGTTTTTCAAGTGCCCAATTTCAAG 840
QY 841 GCAGTTCAACTTACTACGAATGATGCCA TAAAAACCACTCTGCTGGTAGAATTTGACATT 900
Db 841 GCAGTTCAACTTACTACGAATGATGCCA TAAAAACCACTCTGCTGGTAGAATTTGACATT 900
QY 901 TCAATACAGACTTTTCTCTACGCTGGAG ATGCTTACGCTGATCTGCCCTTAAAGT 960
Db 901 TCAATACAGACTTTTCTCTACGCTGGAG ATGCTTACGCTGATCTGCCCTTAAAGT 960
QY 961 GATTCGAGGTACAAAGCCTACTCTCAAG ACTGTCAGCTTGAAGATAAAGAGACACTGC 1020
Db 961 GATTCGAGGTACAAAGCCTACTCTCAAG ACTGTCAGCTTGAAGATAAAGAGACACTGC 1020
QY 1021 GTCTTTTGAATAAAGGCGAGACACAAAG AAGAGGAGCTACTTTACCCCGACATATA 1080
Db 1021 GTCTTTTGAATAAAGGCGAGACACAAAG AAGAGGAGCTACTTTACCCCGACATATA 1080
QY 1081 CCTGGGGATGTTCTCTCCAGTTCAATTTT TACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Db 1081 CCTGGGGATGTTCTCTCCAGTTCAATTTT TACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
QY 1141 AAAAAGGCATTTTTCGAGCCCTTGTGACT ATACCAGTACAGTGTGAAAGCGCAGG 1200
Db 1141 AAAAAGGCATTTTTCGAGCCCTTGTGACT ATACCAGTACAGTGTGAAAGCGCAGG 1200
QY 1201 CTACAGGAGCTGTGCAGTAAACAAGGGG CAGCCGATTTATAGCCCTTTGTACGAGATGCC 1260
Db 1201 CTACAGGAGCTGTGCAGTAAACAAGGGG CAGCCGATTTATAGCCCTTTGTACGAGATGCC 1260
QY 1261 TGTGCTCTGTTGGATCTCTCTGCTTCCCT TCTTTCGCGAGCCACCACTCAGTCTC 1320
Db 1261 TGTGCTCTGTTGGATCTCTCTGCTTCCCT TCTTTCGCGAGCCACCACTCAGTCTC 1320
QY 1321 CTGCTCGAATCTTCTCTCAATCTTCAAC CAGATTTGCTGCTACTGCGCAGCTCAAGTTTA 1380
Db 1321 CTGCTCGAATCTTCTCTCAATCTTCAAC CAGATTTGCTGCTACTGCGCAGCTCAAGTTTA 1380
QY 1381 TTTTCAACCGAAGAGCTCCATTTTGTCTT CCAACATTTGGAATTTCTGCTACTGCGCACA 1440
Db 1381 TTTTCAACCGAAGAGCTCCATTTTGTCTT CCAACATTTGGAATTTCTGCTACTGCGCACA 1440
QY 1441 ACAGAGTTCTGCGGAAGGGAGTATGTAC AGGCTGGCTTGGCTTGTGTTGCTTCAAGTT 1500
Db 1441 ACAGAGTTCTGCGGAAGGGAGTATGTAC AGGCTGGCTTGGCTTGTGTTGCTTCAAGTT 1500
QY 1501 CTTTCAGCCAAACATACATGATCCCATG AAGACAGCGGGAAGCCCTGCTTCTTAAAGATA 1560
Db 1501 CTTTCAGCCAAACATACATGATCCCATG AAGACAGCGGGAAGCCCTGCTTCTTAAAGATA 1560
QY 1561 TCCATCTCTCTCGAACAACAATTTCTTTC CACTTTACAGATGACCCCTCAATCCCCATC 1620
Db 1561 TCCATCTCTCTCGAACAACAATTTCTTTC CACTTTACAGATGACCCCTCAATCCCCATC 1620
QY 1621 ATATGTGGGTTCAGGAACCGGATAGCCCG GTTTATTTGGGTTCTTACCAACAT ---AG 1676
Db 1621 ATATGTGGGTTCAGGAACCGGATAGCCCG GTTTATTTGGGTTCTTACCAACAT ---AG 1676
QY 1677 AACTTCAAGAACACACCCAGATGGAATTT TGGAGCAATGTTGTTTGGGCTGC 1736
Db 1677 AACTTCAAGAACACACCCAGATGGAATTT TGGAGCAATGTTGTTTGGGCTGC 1736
QY 1737 AGGCATAAGGATAGGATTTATCTATTCA GAAAAAGAGCTCAGACATTTCTTAAAGTGGG 1796
Db 1737 AGGCATAAGGATAGGATTTATCTATTCA GAAAAAGAGCTCAGACATTTCTTAAAGTGGG 1800
QY 1797 ATCTTAACTCATCTAAAGGTTTCTCTCTC AAGAGATGCTCTCTGTTGGGAGGAGAACCC 1856

Db 1801 ATCTTAACTCATCTAAAGGTTTCTCTCTC AAGAGATGCTCTCTGTTGGGAGGAGAACCC 1860
QY 1857 CCAGCAAGTATGTACAAAGCAACATCCAG CTTTCATGCGCAGCAGGTGGCGAGATCTCTC 1916
Db 1861 CCAGCAAGTATGTACAAAGCAACATCCAG CTTTCATGCGCAGCAGGTGGCGAGATCTCTC 1920
QY 1917 CTCAGGAGAACCGCCCATATTTATGTGT GTGGAGATGCAAGAAATATATGCGCAAGATGTA 1976
Db 1921 CTCAGGAGAACCGCCCATATTTATGTGT GTGGAGATGCAAGAAATATATGCGCAAGATGTA 1980
QY 1977 CATGATCCCTTGTGCAAAATAAAGCAAG AGGTTTGGAGTTGAAAACTTAGAAGCAATG 2036
Db 1981 CATGATCCCTTGTGCAAAATAAAGCAAG AGGTTTGGAGTTGAAAACTTAGAAGCAATG 2040
QY 2037 AAAACCCCTGCGCACTTTTAAAAAGAA GAAAAACGCTTACGATATTTTGGTCTATAA 2093
Db 2041 AAAACCCCTGCGCACTTTTAAAAAGAA GAAAAACGCTTACGATATTTTGGTCTATAA 2097

RESULT 11

US-11-119-096-43
; Sequence 43, Application US/111119096
; Publication No. US20050191701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rima
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; FILE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: Fast-Seq for Windows Version 4.0
; SEQ ID NO 43
; LENGTH: 2097
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-119-096-43

Query Match 99.3%; Score 2077.4; DB 26; Length 2097;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2092; Conservative 0; Mismatches 1; Indels 4; Gaps 1;
QY 1 ATGAGGAGGTTCTGTTACTATATATGCTACAGCAGGAGCAGGCAAGGCGCATCGCAGAA 60
Db 1 ATGAGGAGGTTCTGTTACTATATGCTACAGCAGGAGCAGGCAAGGCGCATCGCAGAA 60
QY 61 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTGAGATCTTCACTATATTAGTGAA 120
Db 61 GAAATGTGTGAGCAAGCTGTGGTACATGGATTTTCTGAGATCTTCACTATATTAGTGAA 120
QY 121 TCCGATAAGTATGACCTTAAACCGAAACAGCTCTCTTGTGTTGTTGTTTCTACACG 180
Db 121 TCCGATAAGTATGACCTTAAACCGAAACAGCTCTCTTGTGTTGTTGTTTCTACACG 180
QY 181 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTTAAGGAAATACAGAACCAACA 240
Db 181 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTTGTTAAGGAAATACAGAACCAACA 240
QY 241 CTGCCGGTTGATTTCTTTTGTCTACCTGCGGTATGGGTTACTGGGTTCTCGGTGATTGAGAA 300

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Db 241 |||||CTGCGGTTGATTTCTTCTACCTCGGCTATGGGTTACTGGTCTCGGTGATTCAGAA 300
Qy 301 |||||TACACCTACTTTTGCATATGGGGGAGAGATAATTTGATAAAGCACTTTCAAGAGCTTGGAGCC 360
Db 301 |||||TACACCTACTTTTGCATATGGGGGAGAGATAATTTGATAAAGCACTTTCAAGAGCTTGGAGCC 360
Qy 361 |||||CGGCATTTCTATGACACTGACATGCAGATGACTGTGTAGGTTTGTAGAACCTTGTGTTGAG 420
Db 361 |||||CGGCATTTCTATGACACTGACATGCAGATGACTGTGTAGGTTTGTAGAACCTTGTGTTGAG 420
Qy 421 |||||CCGTGGATTTGCTGGACTCTCGCCAGCCCTCAGAAAGCAATTTTAGGTCAAGCAGAGACAA 480
Db 421 |||||CCGTGGATTTGCTGGACTCTCGCCAGCCCTCAGAAAGCAATTTTAGGTCAAGCAGAGACAA 480
Qy 481 |||||GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACTGTCATCTTTGAGGAAGAGAGAGAGAG 540
Db 481 |||||GAGGAGATAAGTGGCGCACTCCCGGTGGCATCACTGTCATCTTTGAGGAAGAGAGAGAGAG 540
Qy 541 |||||AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
Db 541 |||||AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
Qy 601 |||||AGAAAGGATTTCTGAGGTTTTCAGACAAATTCAGTGAACAGCAACCAATCCAATGTTGTA 660
Db 601 |||||AGAAAGGATTTCTGAGGTTTTCAGACAAATTCAGTGAACAGCAACCAATCCAATGTTGTA 660
Qy 661 |||||ATTGAAGACTTTGAGTCTCTCACTTACCCGTTGGTATCCCGCACTCTCAAGGCTCTCTG 720
Db 661 |||||ATTGAAGACTTTGAGTCTCTCACTTACCCGTTGGTATCCCGCACTCTCAAGGCTCTCTG 720
Qy 721 |||||AATATTCCTGGTTTACCCCGAGATATTTACAGTACATCTGACAGGAGTCTTTGGCCAG 780
Db 721 |||||AATATTCCTGGTTTACCCCGAGATATTTACAGTACATCTGACAGGAGTCTTTGGCCAG 780
Qy 781 |||||GAGGAAGCCCAAGTATCTGTGACTTCAGCAGATCCAGTCTTCAAGTGCCAAATTTCAAAG 840
Db 781 |||||GAGGAAGCCCAAGTATCTGTGACTTCAGCAGATCCAGTCTTCAAGTGCCAAATTTCAAAG 840
Qy 841 |||||GCAGTTCAACTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTTGCAATTT 900
Db 841 |||||GCAGTTCAACTACTACGAATGATGCCATAAAACCACTCTGCTGGTAGAATTTGCAATTT 900
Qy 901 |||||TCAAAATACAGACTTTTCTTACGCTGAGAGTCCCTTACGCGTATCTGCGCTTAAAGT 960
Db 901 |||||TCAAAATACAGACTTTTCTTACGCTGAGAGTCCCTTACGCGTATCTGCGCTTAAAGT 960
Qy 961 |||||GATTTCTGAGGTACAAAGCCTACTCCAAGACTGACGCTTGAAGATAAAAGAGACACTGC 1020
Db 961 |||||GATTTCTGAGGTACAAAGCCTACTCCAAGACTGACGCTTGAAGATAAAAGAGACACTGC 1020
Qy 1021 |||||GTCTTTTGAATAAAGGAGAGACACAAAGAGAAAGAGAGTACTCTTACCCAGCATATA 1080
Db 1021 |||||GTCTTTTGAATAAAGGAGAGACACAAAGAGAAAGAGAGTACTCTTACCCAGCATATA 1080
Qy 1081 |||||CTGCGGGATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATTCGGAGCAATTCCT 1140
Db 1081 |||||CTGCGGGATGTTCTCTCCAGTTCAATTTTACCTGGTGTCTTGAATTCGGAGCAATTCCT 1140
Qy 1141 |||||AAAAAGGCATTTTTCGAGCCCTTGTGGACTATACCACTGACAGTGTCTGAAAGCGCAGG 1200
Db 1141 |||||AAAAAGGCATTTTTCGAGCCCTTGTGGACTATACCACTGACAGTGTCTGAAAGCGCAGG 1200
Qy 1201 |||||CTACAGAGCTGTGCAGTAACAAAGGGCGAGCCGATTTATAGCCGCTTTGTACGAGATGCC 1260
Db 1201 |||||CTACAGAGCTGTGCAGTAACAAAGGGCGAGCCGATTTATAGCCGCTTTGTACGAGATGCC 1260
Qy 1261 |||||TGTGCTGCTGTGTGGATCTCTCTGCTTCTCTGCTTCTGCGAGCCAGCCACTCAGTCTC 1320
Db 1261 |||||TGTGCTGCTGTGTGGATCTCTCTGCTTCTCTGCTTCTGCGAGCCAGCCACTCAGTCTC 1320
Qy 1321 |||||CTGCTCGAAACATCTTCTCTAAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
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Db 1321 |||||CTGCTCGAAACATCTTCTCTAAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
Qy 1381 |||||TTTTCACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGAAATTTCTGTCTACTGCCACA 1440
Db 1381 |||||TTTTCACCCAGGAAGCTCCATTTTGTCTTCAACATTTGTGAAATTTCTGTCTACTGCCACA 1440
Qy 1441 |||||ACAGAGGTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGCCCTTGTGTTGCTTCAGTT 1500
Db 1441 |||||ACAGAGGTTCTGCGGAAGGAGTATGTACAGGCTGGCTGGCCCTTGTGTTGCTTCAGTT 1500
Qy 1501 |||||CTTCAGCAAAACATACATGTCATCCCATGAAGAAGAGAGAGAGAGAGAGAGAGAGAGAG 1560
Db 1501 |||||CTTCAGCAAAACATACATGTCATCCCATGAAGAAGAGAGAGAGAGAGAGAGAGAGAGAG 1560
Qy 1561 |||||TCCATCTCTCTCGAACACAAATTTTCCACCTTACCAGATGACCCCTCAATCCCATC 1620
Db 1561 |||||TCCATCTCTCTCGAACACAAATTTTCCACCTTACCAGATGACCCCTCAATCCCATC 1620
Qy 1621 |||||ATAATGTTGGTTCAGGAACCCGATAGCCCGCTTTATTTGGGTTTCTTACCAACAT 1676
Db 1621 |||||ATAATGTTGGTTCAGGAACCCGATAGCCCGCTTTATTTGGGTTTCTTACCAACATAGAG 1680
Qy 1677 |||||AAACTCCAGAAACAAACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1736
Db 1681 |||||AAACTCCAGAAACAAACCCAGATGGAATTTTGGAGCAATGTGTTGTTTGGCTGC 1740
Qy 1737 |||||AGCATTAAGATAGGATTTATCTATTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1796
Db 1741 |||||AGCATTAAGATAGGATTTATCTATTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1800
Qy 1797 |||||ATCTTAACCTCATCTAAAGGTTTCTTCTCAAGAGATGCTCTCTTGGGAGAGAGAGAGCC 1856
Db 1801 |||||ATCTTAACCTCATCTAAAGGTTTCTTCTCAAGAGATGCTCTCTTGGGAGAGAGAGCC 1860
Qy 1857 |||||CCAGCAAAAGTATGTACAGAACCAATCCAGCTTCATGGCCAGCAGAGTGGCGAGATCCTC 1916
Db 1861 |||||CCAGCAAAAGTATGTACAGAACCAATCCAGCTTCATGGCCAGCAGAGTGGCGAGATCCTC 1920
Qy 1917 |||||CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGGCCCAAGGATGTA 1976
Db 1921 |||||CTCCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGGCCCAAGGATGTA 1980
Qy 1977 |||||CATGATGCCCTTGTGCAATAATAAGCAAGAGAGTGTGAGTTGCAAAACTAGAGCAATG 2036
Db 1981 |||||CATGATGCCCTTGTGCAATAATAAGCAAGAGAGTGTGAGTTGCAAAACTAGAGCAATG 2040
Qy 2037 |||||AAAACTGCGCCACTTTTAAAGAGAAAAACGCTTACCTTCAGGATATTTGGTCTATAA 2093
Db 2041 |||||AAAACTGCGCCACTTTTAAAGAGAAAAACGCTTACCTTCAGGATATTTGGTCTATAA 2097
```

RESULT 12

US-10-741-600-692

; Sequence 692, Application US/10741600

; Publication No. US20050026169A1

; GENERAL INFORMATION:

; APPLICANT: CARGILL, Michele et al.

; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH

; FILE REFERENCE: CL001499

; CURRENT APPLICATION NUMBER: US/10/741,600

; NUMBER OF SEQ ID NOS: 73997

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 692

; LENGTH: 3256

; TYPE: DNA

; ORGANISM: Homo sapiens

US-10-741-600-692

Query Match

Best Local Similarity 98.9%; Score 2070.6; DB 22; Length 3256;

Matches 2072; Conservative 21; Mismatches 0; Indels 4; Gaps 1;

QY 1 ATGAGAGGTTTCTGTTACTATATGCTACAGCAGGGACAGGCCAAAGGCCATCCAGAA 60
DB |||||
QY 94 ATGAGAGGTTTCTGTTACTATATGCTACAGCAGGGACAGGCCAAAGGCCATCCAGAA 153
DB |||||
QY 61 GAAATGTGTGAGCAAGCTGTGTGATCATGATTTCTGCGAGATCTTCACTGTATTAGTGA 120
DB |||||
QY 154 GAAATGTGTGAGCAAGCTGTGTGATCATGATTTCTGCGAGATCTTCACTGTATTAGTGA 213
DB |||||
QY 121 TCCGATTAAGTATGACTTAAACCCGAAACAGCTCTCTTGTGTTGTGTTCTACCCAG 180
DB |||||
QY 214 TCCGATTAAGTATGACTTAAACCCGAAACAGCTCTCTTGTGTTGTGTTCTACCCAG 273
DB |||||
QY 181 GGCACCGGAGACCCACCGGACACAGCCGCAAGTTGTTAAGAAATACAGAACCAACA 240
DB |||||
QY 274 GGCACCGGAGACCCACCGGACACAGCCGCAAGTTGTTAAGAAATACAGAACCAACA 333
DB |||||
QY 241 CTGCGGTTGATTTCTTCTGCTCACTCGGTATGAGTTACTGGTCTCGGTGATTCAGAA 300
DB |||||
QY 334 CTGCGGTTGATTTCTTGTCTCACCTGGGTATGAGTTACTGGTCTCGGTGATTCAGAA 393
DB |||||
QY 301 TACACTACTTTTGAATGGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTCGAGCC 360
DB |||||
QY 394 TACACTACTTTTGAATGGGGGGAAGATAATTGATAAACGACTTCAAGAGCTTCGAGCC 453
DB |||||
QY 361 CGGCATTTCTATGACACTGGACATGCGAGATGACTGTGTAGTTTAACTTTGTGTTGAG 420
DB |||||
QY 454 CGGCATTTCTATGACACTGGACATGCGAGATGACTGTGTAGTTTAACTTTGTGTTGAG 513
DB |||||
QY 421 CCGTGGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTGTGTTCAAGCAGAGCA 480
DB |||||
QY 514 CCGTGGATTTGCTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTGTGTTCAAGCAGAGCA 573
DB |||||
QY 481 GAGGAGATAAGTGGGCGACTCCCGGTGGCATCACCTGTCATCTTCAGGACAGACCTTGTG 540
DB |||||
QY 574 GAGGAGATAAGTGGGCGACTCCCGGTGGCATCACCTGTCATCTTCAGGACAGACCTTGTG 633
DB |||||
QY 541 AAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 600
DB |||||
QY 634 AAGTCAGAGCTGCTACACATTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGGA 693
DB |||||
QY 601 AGAAGGATTTCTGAGGTTTGAAGCAAAATGCGAGTGAACAGCAACCAATCCAAATTTGTA 660
DB |||||
QY 694 AGAAGGATTTCTGAGGTTTGAAGCAAAATGCGAGTGAACAGCAACCAATCCAAATTTGTA 753
DB |||||
QY 661 ATTGAAGACTTTGAGTCTCACTTACCCTGTCGGTACCCCACTCTCAAGCCCTCTCTG 720
DB |||||
QY 754 ATTGAAGACTTTGAGTCTCACTTACCCTGTCGGTACCCCACTCTCAAGCCCTCTCTG 813
DB |||||
QY 721 AATATTCCTGTTTACCCCAAGATTTTACAGGTACATCTCGAGAGTCTCTTGGCCAG 780
DB |||||
QY 814 AATATTCCTGTTTACCCCAAGATTTTACAGGTACATCTCGAGAGTCTCTTGGCCAG 873
DB |||||
QY 781 GAGGAAGCCCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTCCCAATTCAAAG 840
DB |||||
QY 874 GAGGAAGCCCAAGTATCTGTGACTTCAGCAGATCCAGTTTTTCAAGTCCCAATTCAAAG 933
DB |||||
QY 841 CGAGTTCAACTTACTACGAATGATGCCATAAACCACTCTGCTGTAGNATTTGACATTT 900
DB |||||
QY 934 CGAGTTCAACTTACTACGAATGATGCCATAAACCACTCTGCTGTAGNATTTGACATTT 993
DB |||||
QY 901 TCAATACAGACTTTTCTTATCAGCCTGGAGATGCTTTTCAAGTCCCAATTCAAAGT 960
DB |||||
QY 994 TCAATACAGACTTTTCTTATCAGCCTGGAGATGCTTTTCAAGTCCCAATTCAAAGT 1053
DB |||||
QY 961 GATTTGAGTACAAAGCTTACTCAAAGACTGAGCTTGAAGTAAAGAGAGCAGCTGC 1020
DB |||||
QY 1054 GATTTGAGTACAAAGCTTACTCAAAGACTGAGCTTGAAGTAAAGAGAGCAGCTGC 1113
DB |||||
QY 1021 GTCTTTTGAATAAAGGCGACACAAAGAAAGAGAGCTTACCTTACCCAGCATATA 1080
DB |||||
QY 1114 GTCTTTTGAATAAAGGCGACACAAAGAAAGAGAGCTTACCTTACCCAGCATATA 1173
DB |||||

RESULT 13

US-10-741-600-693

; Sequence 693, Application US/10741600

; Publication No. US20050026169A1

QY 1081 CCTGCGGAGATGTTCTCTCAGTTCAATTTTTTACCTGGTGTCTGAAATCCGAGCAATTCCT 1140
DB |||||
QY 1174 CCTGCGGAGATGTTCTCTCAGTTCAATTTTTTACCTGGTGTCTGAAATCCGAGCAATTCCT 1233
DB |||||
QY 1141 AAAAAGGCATTTTTCGAGAGCCCTTGTGACTATACAGGTGACAGTCTGAAAGCGCAG 1200
DB |||||
QY 1234 AAAAAGGCATTTTTCGAGAGCCCTTGTGACTATACAGGTGACAGTCTGAAAGCGCAG 1293
DB |||||
QY 1201 CTACAGAGCTGTGCAAGTAAACAAAGGCGCAGCGGATATAGCCGCTTGTGTACGAGATGCC 1260
DB |||||
QY 1294 CTACAGAGCTGTGCAAGTAAACAAAGGCGCAGCGGATATAGCYGCTTGTGTACGAGATGCC 1353
DB |||||
QY 1261 TGTGCTGCTGTTGGATCT 1320
DB |||||
QY 1354 TGTGCTGCTGTTGGATCT 1413
DB |||||
QY 1321 CTGCTCGAACAATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
DB |||||
QY 1414 CTGCTCGAACAATCTTCTTAACTTCAACCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1473
DB |||||
QY 1381 TTTCAACCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1440
DB |||||
QY 1474 TTTCAACCAGGAAAGCTCCATTTTGTCTTCAACATTTGTGGAATTTCTGTCTACTGCCACA 1533
DB |||||
QY 1441 ACAGAGTTCTGCGGAAGGAGATGTACAGCTGGCTGGCTTGTGTTGCTTCAAGTT 1500
DB |||||
QY 1534 ACAGAGTTCTGCGGAAGGAGATGTACAGCTGGCTGGCTTGTGTTGCTTCAAGTT 1593
DB |||||
QY 1501 CTTGAGCCAAACATACATGCAATCCCATGAGACAGCGGGAAGCCCTGGCTCTTAAGATA 1560
DB |||||
QY 1594 CTTGAGCCAAACATACATGCAATCCCATGAGACAGTGGGAAGCCCTGGCTCTTAAGATA 1653
DB |||||
QY 1561 TCCATCTCTCTCGAACAACAAATTTCTTTCATTTACAGATGACCCCTCAATCCCAATC 1620
DB |||||
QY 1654 TCCATCTCTCTCGAACAACAAATTTCTTTCATTTACAGATGACCCCTCAATCCCAATC 1713
DB |||||
QY 1621 ATATGTGGTTCAGGAACCGGCTATAGCCGCTTATTTGGGTTCTTCAACAT --- AG 1676
DB |||||
QY 1714 ATATGTGGTTCAGGAACCGGCTATAGCCGCTTATTTGGGTTCTTCAACATAGAGAG 1773
DB |||||
QY 1677 AAATCTCAAGAACACACCCAGATGGAATTTTGGAGCAATGCTGTTTGGCTGTC 1736
DB |||||
QY 1774 AAATCTCAAGAACACACCCAGATGGAATTTTGGAGCAATGCTGTTTGGCTGTC 1833
DB |||||
QY 1737 AGGATTAAGGATAGGATTTATCTATTAGAAAAGAGCTCAGACATTTCTTTAAGCATGG 1796
DB |||||
QY 1834 AGGATTAAGGATAGGATTTATCTATTAGAAAAGAGCTCAGATATTTCTTTAAGCATGG 1893
DB |||||
QY 1797 ATCTTAATCTATAAGGTTTCTCTCTCAAGAGATGCTCTGTTGGGAGGAGAGGCC 1856
DB |||||
QY 1894 ATCTTAATCTATAAGGTTTCTCTCTCAAGAGATGCTCTCTGTTGGGAGGAGAGGCC 1953
DB |||||
QY 1857 CCAGCAAGTATGTACAGAACACATCCAGCTTCAATGGCCAGCAGGTGGCGAATTCCTC 1916
DB |||||
QY 1954 CCAGCAAGTATGTACAGAACACATCCAGCTTCAATGGCCAGCAGGTGGCGAATTCCTC 2013
DB |||||
QY 1917 CTCCAGGAGAACCGGCTATTTATGTTGTGGAGATGCAAGAAATATGGCCAAAGATGTA 1976
DB |||||
QY 2014 CTCCAGGAGAACCGGCTATTTATGTTGTGGAGATGCAAGAAATATGGCCAAAGATGTA 2073
DB |||||
QY 1977 CATGATGCTTGTGCAAAATTAAGCAAGAGGTTGAGTTGAAAAATAGAAAGCAATG 2036
DB |||||
QY 2074 CATGATGCTTGTGCAAAATTAAGCAAGAGGTTGAGTTGAAAAATAGAAAGCAATG 2133
DB |||||
QY 2037 AAAACCTGGCCACTTTTAAAGAGAAACAAAGCTTACCTTCAAGATATTTGGTCATAA 2093
DB |||||
QY 2134 AAAACCTGGCCACTTTTAAAGAGAAACAAAGCTTACCTTCAAGATATTTGGTCATAA 2190
DB |||||

QY 1917 CTCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAAAGGATGTA 1976
Db 2032 CTCAGGAGAACGGCCATATTTATGTGTGGAGATGCAAGAAATATGGCCAAAGGATGTA 2091
QY 1977 CATGATGCCCTTGTGCAATATTAAGCAAGAGGTTGGAGTTGAAAACCTAGAACCAATG 2036
Db 2092 CATGATGCCCTTGTGCAATATTAAGCAAGAGGTTGGAGTTGAAAACCTAGAACCAATG 2151
QY 2037 AAAACCTGGCCACTTTAAAGAAAGAAACGCTACCTTCAGGATATTTGGTCATAA 2093
Db 2152 AAAACCTGGCCACTTTAAAGAAAGAAACGCTACCTTCAGGATATTTGGTCATAA 2208

RESULT 14

US-09-371-347-45
; Sequence 45, Application US/09371347
; Publication No. US20030082676A1
; GENERAL INFORMATION:
; APPLICANT: Roy A. Gravel et al.
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, AND CANCER
; FILE REFERENCE: 50004/003003
; CURRENT APPLICATION NUMBER: US/09/371,347
; CURRENT FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 45
; LENGTH: 2094
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-371-347-45

Query Match 98.6%; Score 2063; DB 10; Length 2094;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 2090; Conservative 0; Mismatches 0; Indels 7; Gaps 2;

QY 1 ATGAGGAGTTCTGTTACTATATGCTACAGCAGGAGGACAGGCAAGGCCATGCGAGAA 60
Db 1 ATGAGGAGTTCTGTTACTATATGCTACAGCAGGAGGACAGGCAAGGCCATGCGAGAA 60
QY 61 GAAATGTGTGAGCAAGCTGTGTACATGSAATTTCTGCAGATCTTCACTGTATTAGTGAA 120
Db 61 GAAATGTGTGAGCAAGCTGTGTACATGSAATTTCTGCAGATCTTCACTGTATTAGTGAA 120
QY 121 TCCGATAAGTATGACTTAAACCCGAAACAGCTCTCTTTGTTGTTGTTCTTACCACG 180
Db 121 TCCGATAAGTATGACTTAAACCCGAAACAGCTCTCTTTGTTGTTGTTCTTACCACG 180
QY 181 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTGTTAAGGAATACAGAACCAACA 240
Db 181 GGCACCGGAGACCCACCCGACACAGCCCGCAAGTTGTTAAGGAATACAGAACCAACA 240
QY 241 CTGCGGTTGATTTCTTCTCACCCTGGGTATGGGTTACTGGGTCCTCGGTGATTTCAGAA 300
Db 241 CTGCGGTTGATTTCTTCTCACCCTGGGTATGGGTTACTGGGTCCTCGGTGATTTCAGAA 300
QY 301 TACACCTACTTTTGGCAATGGGGGGAAGATAATTGATAAACGACTTCAAGAGCTGGAGCC 360
Db 301 TACACCTACTTTTGGCAATGGGGGGAAGATAATTGATAAACGACTTCAAGAGCTGGAGCC 360
QY 361 CGGCATTTCTATGACATCGGACATGATGATGATGATGATGATGATGATGATGATGATG 420
Db 361 CGGCATTTCTATGACATCGGACATGATGATGATGATGATGATGATGATGATGATGATG 420
QY 421 CCGTGGATTGTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA 480
Db 421 CCGTGGATTGTGGACTCTGGCCAGCCCTCAGAAAGCAATTTTAGTCAAGCAGAGGACAA 480

QY 481 GAGGAGATAAGTGGCGCATCTCCCGTGGCATCACTGTCATCTTTGAGGACAGACCTTGTG 540
Db 481 GAGGAGATAAGTGGCGCATCTCCCGTGGCATCACTGTCATCTTTGAGGACAGACCTTGTG 540
QY 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGA 600
Db 541 AAGTCAGAGCTGTACACATTTGAATCTCAAGTCGAGCTTCTGAGATTCGATGATTCAGA 600
QY 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATCGAGTGAACAGCAACCAATCAATGTTGTA 660
Db 601 AGAAAGGATTTCTGAGGTTTGAAGCAAAATCGAGTGAACAGCAACCAATCAATGTTGTA 660
QY 661 ATTGAAGACTTTGAGTCTCTCACTTACCGTTCGGTACCCCACTCTCAAGGCCCTCTCTG 720
Db 661 ATTGAAGACTTTGAGTCTCTCACTTACCGTTCGGTACCCCACTCTCAAGGCCCTCTCTG 720
QY 721 AATATTCTGTTTACCCCAAGATATTTACAGGTACATCTGCAAGGAGTCTCTTGGCCAG 780
Db 721 AATATTCTGTTTACCCCAAGATATTTACAGGTACATCTGCAAGGAGTCTCTTGGCCAG 780
QY 781 GAGGAAAGCCAAAGTATCTGTCATCTCAGCAGATCCAGTTTTCAGTGCCCAATTTCAAAG 840
Db 781 GAGGAAAGCCAAAGTATCTGTCATCTCAGCAGATCCAGTTTTCAGTGCCCAATTTCAAAG 840
QY 841 GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTGCTGGTAGAATTTGACAT 900
Db 841 GCAGTTCAACTTACTACGAATGATGCCATAAAAAACCACTCTGCTGGTAGAATTTGACAT 900
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Db 901 TCAATACAGACTTTTCTCTCAGCTTACAGCTGGAGATGCTTACAGGTGATCTGCCCTAACAGT 960
QY 961 GATTCTGAGGTACAAAGGCTTACTCAAAAGCTGAGCTTTGAAGATAAAAGAGAGACATGC 1020
Db 961 GATTCTGAGGTACAAAGGCTTACTCAAAAGCTGAGCTTTGAAGATAAAAGAGAGACATGC 1020
QY 1021 GTCTTTTGAATAAAGGACACACAAAGAAAGAGAGCTTACCTTACCCAGCATATA 1080
Db 1021 GTCTTTTGAATAAAGGACACACAAAGAAAGAGAGCTTACCTTACCCAGCATATA 1080
QY 1081 CCTCGGGATGTTCTCTCCAGTTCACTTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
Db 1081 CCTCGGGATGTTCTCTCCAGTTCACTTTTACCTGGTGTCTTGAATCCGAGCAATTCCT 1140
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Db 1141 AAAAAGGCATTTTTCGAGCCCTTGTGACTATACAGTACAGTGTCTGAAAAGCGCAGG 1200
QY 1201 CTACAGGAGCTGTGAGTAAACAAAGGGGCGAGCCGATTATAGCCGCTTTGTACGAGATGCC 1260
Db 1201 CTACAGGAGCTGTGAGTAAACAAAGGGGCGAGCCGATTATAGCCGCTTTGTACGAGATGCC 1260
QY 1261 TGTGCTGTGTTGGATCT 1320
Db 1261 TGTGCTGTGTTGGATCT 1320
QY 1321 CTGCTCGAACAATCTTCTTAACTTCAACCCAGACCATATTCGTCGCAAGCTCAAGTTTA 1380
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QY 1381 TTTTCAACCCAGGAAAGCTTCCATTTTGTCTTCAACATTTGTGAATTTCTGTCTACTGCCACA 1440
Db 1381 TTTTCAACCCAGGAAAGCTTCCATTTTGTCTTCAACATTTGTGAATTTCTGTCTACTGCCACA 1440
QY 1441 ACAGAGTTCTGCGGAAGGGAGTATGTACAGGCTGGCTGGCTTGTGGTTGCTTCAGTT 1500
Db 1441 ACAGAGTTCTGCGGAAGGGAGTATGTACAGGCTGGCTGGCTTGTGGTTGCTTCAGTT 1500
QY 1501 CTTTCAGGCAACATACATGATCCCATGACAGCGGAAAGCCCTGGCTCTCTAAAGATA 1560
Db 1501 CTTTCAGGCAACATACATGATCCCATGACAGCGGAAAGCCCTGGCTCTCTAAAGATA 1560

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Qy 1561 TCCATCTCTCCTCGAACAACAAATTTCTTCCACATTACAGATGACCCCTCAATCCCATC 1620
Db 1561 TCCATCTCTCCTCGAACAACAAATTTCTTCCACATTACAGATGACCCCTCAATCCCATC 1620

Qy 1621 ATAAATGTGGGTCCAGGAACCGGATAGCCCGCTTTATTGGGTTTCTTCAACAT- ---AG 1676
Db 1621 ATAAATGTGGGTCCAGGAACCGGATAGCCCGCTTTATTGGGTTTCTTCAACATAGAGAG 1680

Qy 1677 AAATCCAGNAGAACACACCAGATGGAAATTTTGGAGCAATGTGGTTTGGGTGC 1736
Db 1681 AAATCCAGNAGAACACACCAGATGGAAATTTTGGAGCAATGTG- --GTTTTTGGGTGC 1737

Qy 1737 AGGCATTAAGGATAGGGATTATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1796
Db 1738 AGGCATTAAGGATAGGGATTATCTATTTCAGAAAGAGCTCAGACATTTCTTAAAGCATGGG 1797

Qy 1797 ATCTTAACTCATCTAAAGGTTTCCTTCTCAAGAGATGCTCCTGTGGGAGGAGGAAGCC 1856
Db 1798 ATCTTAACTCATCTAAAGGTTTCCTTCTCAAGAGATGCTCCTGTGGGAGGAGGAAGCC 1857

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Db 1918 CTCCAGGAGAACGCCATATTATTGTGTGGAGATGCAAGAAATATGGCCAAAGATGTA 1977

Qy 1977 CATGATGCCCTTGTGCAAAATAATAAGCAAGAGGTGGAGTTGAAAACTAGAAGCAATG 2036
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Qy 2037 AAAACCCCTGGCCACTTTAAAGAGAGAAAACGCTACCTTCAGGATATTGGTCTATAA 2093
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RESULT 15
; Sequence 45, Application US/11119096
; Publication No. US2005019701A1
; GENERAL INFORMATION:
; APPLICANT: Gravel, Roy A,
; APPLICANT: Rozen, Rina,
; APPLICANT: Leclerc, Daniel
; APPLICANT: Wilson, Aaron
; APPLICANT: Rosenblatt, David
; TITLE OF INVENTION: HUMAN METHIONINE SYNTHASE REDUCTASE:
; TITLE OF INVENTION: CLONING, AND METHODS FOR EVALUATING RISK OF NEURAL TUBE
; TITLE OF INVENTION: DEFECTS, CARDIOVASCULAR DISEASE, CANCER, AND DOWN'S SYNDROME
; FILE REFERENCE: 50004/003005
; CURRENT APPLICATION NUMBER: US/11/119,096
; PRIOR FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: 09/487,841
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: 09/371,347
; PRIOR FILING DATE: 1999-08-10
; PRIOR APPLICATION NUMBER: 09/232,028
; PRIOR FILING DATE: 1999-01-15
; PRIOR APPLICATION NUMBER: 60/071,622
; PRIOR FILING DATE: 1998-01-16
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 45
; LENGTH: 2094
; TYPE: DNA
; ORGANISM: Homo sapiens
; US-11-119-096-45
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Query Match 98.6%; Score 2063; DB 26; Length 2094;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 2090; Conservative 0; Mismatches 0; Indels 7; Gaps 2;
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Db 1 ATGAGGAGGTTTCTGTCTATATGCTACACAGCAGGACAGGCAAAAGGCCATCGCAGAA 60

Qy 61 GAAATGTTGAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTGTATTAGTGAA 120
Db 61 GAAATGTTGAGCAAGCTGTGGTACATGGATTTTCTGCAGATCTTCACTGTATTAGTGAA 120

Qy 121 TCCGATTAAGTATGACCTTAAAAACCGAACAAGCTCTCTCTTCTGTGTGGTGTCTTACCACG 180
Db 121 TCCGATTAAGTATGACCTTAAAAACCGAACAAGCTCTCTCTTCTGTGTGGTGTCTTACCACG 180

Qy 181 GGCACCCGAGACCCACCCGACACAGACCCGCAAGTTTCTTAAGGAAATACAGAAACCAACA 240
Db 181 GGCACCCGAGACCCACCCGACACAGACCCGCAAGTTTCTTAAGGAAATACAGAAACCAACA 240

Qy 241 CTGCGGTTGATTTCTTGTCTACCTGCGGTATGGGTACTGGGTCTCGGTGATTCAGAA 300
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Qy 301 TACACCTACTTTTGCATGGGGGAAGATAAATTGATAAAGACTTCAAGAGCTTGGAGCC 360
Db 301 TACACCTACTTTTGCATGGGGGAAGATAAATTGATAAAGACTTCAAGAGCTTGGAGCC 360

Qy 361 CGGCATTTCTATGACACTGACATGACATGCTGTGTAGGTTTAGAATCTTGTGTTGAG 420
Db 361 CGGCATTTCTATGACACTGACATGACATGCTGTGTAGGTTTAGAATCTTGTGTTGAG 420

Qy 421 CCGTGGAATTGCTGGAATCTCTGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGCAA 480
Db 421 CCGTGGAATTGCTGGAATCTCTGCCAGCCCTCAGAAAGCATTTTAGGTCAAGCAGAGGCAA 480

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Db 481 GAGGAGATTAAGTGGCGCACTCCCGGTGGCATCACTGCATCCTTGAGGACAGACTTGTG 540

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Qy 601 AGAAAGGATCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGTA 660
Db 601 AGAAAGGATCTGAGGTTTGAAGCAAAATGCAAGTGAACAGCAACCAATCCAAATGTTGTA 660

Qy 661 ATTGAAGACTTTGAGTCTCTCACTTACCCTTCCGTTCCGTTCCGTTCCGTTCCGTTCCG 720
Db 661 ATTGAAGACTTTGAGTCTCTCACTTACCCTTCCGTTCCGTTCCGTTCCGTTCCGTTCCG 720

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Db 721 AATATTCCTGGTTTACCCCAAGATATTTACAGGTACATCTGCAGGAGTCTCTTGGCCAG 780

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Db 1081 |||||CTGCGGATGTTCTCTCAGTTCAATTTTACCTGGTGTCTGAAATCCGAGCAATTCCT 1140
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Db 1201 CTACAGGAGCTGTGCAAGTAAACAAGGGGAGCCGATATAGCCGCTTTGTAGAGATGCC 1260
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Qy 1321 CTGCTCGAACAATCTTCTTAACTTCAAGCCAGACCATATTCGTGTGCAAGCTCAAGTTTA 1380
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Qy 1441 ACAGAGTTCTCGGAGGAGTATGTACAGCTGGCTGGCTTGGTTGCTTCACTT 1500
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